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FLOOD CONTROL PROJECTS AND ESA

HEARING

BEFORE THE

COMMITTEE ON RESOURCES
HOUSE OF REPRESENTATIVES

ONE HUNDRED FIFTH CONGRESS

FIRST SESSION

ON

H.R. 478

A BILL TO AMEND THE ENDANGERED SPECIES ACT OF 1973 TO IMPROVE THE ABILITY OF INDIVIDUALS AND LOCAL, STATE, AND FEDERAL AGENNCIES TO COMPLY WITH THAT ACT IN BUILDING, OPERATING, MAINTAINING, OR REPAIRING FLOOD CONTROL PROJECTS, FACILITIES, OR STRUCTURES.

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FLOOD CONTROL PROJECTS AND ESA

THURSDAY, APRIL 10, 1997

House of Representatives,
Committee on Resources,
Washington, DC and Sacramento, CA.

The Committee met, pursuant to call, at 12:10 p.m., in room 1334, Longworth House Office Building, Hon. Don Young (Chairman of the Committee) presiding.

STATEMENT OF HON. DON YOUNG, A U.S. REPRESENTATIVE FROM ALASKA; AND CHAIRMAN, COMMITTEE ON RESOURCES

The Chairman. Good afternoon—good morning. It depends on which side of this dais that you are sitting on. Those in Sacramento, it is good morning, and, of course, here it is good afternoon.

The Committee on Resources will come to order. Today, the Committee will try something new. As we sit here in the capital of our country in Washington, DC, we will hear testimony from citizens sitting in the State capital of Sacramento, California, through the use of teleconference technology.

While this technology is not new, it is new to the House of Representatives. We have only had the capability to use teleconferences for the past few years. This will be the first time the Committee on Resources held a hearing through teleconference.

Today, we will hear from several citizens, who were victims of the severe flooding in California this past December and January, regarding how the Endangered Species Act has impacted their ability to protect themselves from floodwaters.

Ordinarily, for the Full Committee to have the opportunity to hear their firsthand stories, it would require many of them to spend a great deal of time and money to travel a long distance to appear before us on this Committee. The Committee could go to California but, again, at great cost to the Committee and only during the district work period.

I am particularly proud today to be able to take the testimony of nine individuals with firsthand knowledge of the issue before the Committee through the use of this wonderful medium. This hearing is extremely important, not only to California, but to every area in the country that may someday face flooding.

Whether it is down in Louisiana or in the northern end of Minnesota, as is happening today, the ability to build, repair, and reconstruct and maintain levees and other flood protection facilities is vital to the safety of millions of Americans.

At this point, I would like to yield the remainder of my time to a leader in this area, Congressman Richard Pombo, to make an opening, brief statement and introduce our witnesses from California. Mr. Pombo.

STATEMENT OF HON. RICHARD POMBO, A U.S. REPRESENTATIVE FROM CALIFORNIA

Mr. POMBO. Thank you, Mr. Chairman. I would like to take this opportunity to welcome the witness panels that are testifying today from Sacramento. It is new technology. I expect everything will go well in doing this. It was our idea over the past couple of years to try to bring more people into the process and to try to allow more real people who don't normally have the opportunity to testify before a congressional Committee to have that opportunity. This new technology allows us that opportunity.

I would like to welcome you to this hearing today. And on our first panel, Mr. Chairman, we have Mr. Brent Hastey, who is the Third District Supervisor from Yuba County; Mr. Dante Nomellini, who is the Central Delta Water Agency; Mr. Norm Yenni from Sonoma, California; Dr. Jeffrey Mount, who is a Professor of Geology from Davis, California; and Mr. Christopher Lee, who is a Trustee of the Reclamation District 556 from Walnut Grove, California. Welcome today, and thank you very much, Mr. Chairman.

The CHAIRMAN. OK. At this time, I will recognize Mr. Calvert—if he would like to comment from California also.

STATEMENT OF HON. KEN CALVERT, A U.S. REPRESENTATIVE FROM CALIFORNIA

Mr. CALVERT. Thank you, Mr. Chairman. I appreciate you having this hearing today. In the first year that I was elected to Congress, we had a flood in Riverside County along the Santa Margarita River. It caused many millions of dollars in damage, and, in fact, several Marine Corps helicopters were destroyed at Camp Pendleton because of dike failure.

We have a gentleman here who is going to testify in one of the panels from Riverside County, Mr. Frank Peairs, and I look forward to his testimony because even though the news, of course, is about northern California, we have problems in southern California; in fact, all over the United States because of lack of maintenance of flood control channels cause potential great harm and have caused harm to the public safety to Americans. So I thank you very much for having this hearing.

The CHAIRMAN. Thank you, Mr. Calvert. Mr. Dooley—Cal Dooley.

STATEMENT OF HON. CALVIN DOOLEY, A U.S. REPRESENTATIVE FROM CALIFORNIA

Mr. DOOLEY. Thank you, Mr. Chairman. I appreciate you holding this hearing. I think the overriding objective here is how do we balance the application of the Endangered Species Act with a need to ensure we are not infringing upon those issues related to health and safety.

I would also at this time like to ask for unanimous consent that any Democratic members can have their statements inserted into the record, as well as a statement by my colleague, Gary Condit from California, that he would also like to have entered into the record.

The CHAIRMAN. Without objection.

[Statement of Mr. Condit follows:]

STATEMENT OF HON. GARY A. CONDIT, A U.S. REPRESENTATIVE FROM CALIFORNIA

Good Morning.

I want to thank the Committee for allowing me to present testimony today. I look forward to working with you during this process as we work on finding solutions to real life problems that we all face during times of crisis.

As the Committee is aware, the state of California, and in particular the 18th Congressional District, was severely impacted by this year's earlier flood disaster. As you know, a tremendous amount of federal resources have been and continue to be expended in response to this flood event. Although it is true that this was a flood event of monumental proportions, and that only so much can be addressed by a human response, I believe that much can be done to better address the long term flood protection needs of California, and in particular of the Central Valley. It is my hope that some of the solutions which we propose will better enable the federal government to provide a high level of flood protection so as to better enable us to avoid the fiscal and human costs associated with future flooding of this magnitude. I know that it is a shared goal of all of us that the federal government provide a high level of assistance, instead of obstacles in the regulatory process.

To this end, a key issue involving levee and flood control system protection that must be addressed is the need to waive portions of the Endangered Species Act so that repairs and improvements to the system can take place. This waiver must go beyond the period of the Spring snow melt, as proposed by the Department of the Interior, as many of the repairs will not be completed by that time. Additionally, any waiver of the Act must include maintenance of the levee systems. I am working closely with Representatives Fazio, Herger and Pombo on various proposals including H.R. 478 and H.R. 1155, aimed at accomplishing these goals, and am hopeful that the Committee will address these concerns in a Bill.

To close, let me give you an example I have used before of why legislation is needed. The 1995 flood in the City of Newman was caused by the nearby rain-swollen, debris-filled Orestimba Creek. Similar circumstances along the Pajaro and Salinas Rivers caused extensive damage to Monterey and Santa Cruz Counties as well.

For years, officials in these communities have been consulting with officials from the Army Corps of Engineers and the U.S. Fish and Wildlife Service to receive authorization to remove the brush and debris from these waterways. It took over a year to receive permits for two portions of the Orestimba Creek, because of the cumbersome consultation process related for protection of the Elderberry bush, habitat for the Valley Elderberry Longhorn Beetle. It is expected to take as long to clear the debris-filled section of Orestimba Creek that is responsible for the Newman flood, regardless of the need to avert future disasters of this kind.

Pajaro and Salinas River Flood Control District officials never reached agreement with the Fish and Wildlife Service regarding protection of an ivy plant, and, as a result suffered a fate much worse than the City of Newman.

While some people may not agree that the problems associated with these examples are a result of the Endangered Species Act, I can say first hand that they are a major contributor to the problems these communities and businesses in my district face every day with the way ESA law is currently administered.

Thank you again for allowing me this time.

The CHAIRMAN. And, Mr. Vento, do you have any statements at this time?

STATEMENT OF HON. BRUCE VENTO, A U.S. REPRESENTATIVE FROM MINNESOTA

Mr. VENTO. Well, Mr. Chairman, thank you for the opportunity and for holding the hearing. I understand that there is some controversy that surrounds the application of the Endangered Species Act as it deals with various projects. But my observations with regards to whether it is bridges, or flood projects—I guess this is principally a flood project—is that it is a normal course in terms of application time and advanced planning for these that becomes very important.

We know that water projects per se are subject to a study—feasibility studies, obviously, with regard to improvement and repair that may—but there are various types of waivers that are available and should be utilized. I mean, obviously, life is complicated in 1997. I don't know that we need to apologize for that as we gain more responsibility and expect more out of our resources.

But I am interested in looking at this to see if there are solutions to difficulties that are arising. Quite candidly, I think all of us are served better by that, rather than trying to find, as it were I think, and some of us suspect—I know there is some concern about the fact that we not scapegoat a specific law.

One of the problems I think that has repeatedly occurred with the Endangered Species Act, Mr. Chairman—it is a powerful law and an important law—but that, frankly, other environmental laws and procedures are not used, and so this becomes sort of the last resort sort of aspect. And I think that it really indicates some serious flaws in terms of updating processes for projects and for our consideration; for instance, using NEPA or using EIS's more effectively, or the planning processes and procedures that we have in place.

I think that is what is really indicated by this, and I hope that this hearing will be helpful in terms of trying to work toward an overall solution with regards to these issues rather than keeping to heap criticism on what I think is an important law.

The CHAIRMAN. Well, I would somewhat agree with the gentleman, but I can also suggest that anytime a bureaucracy has authority to do what the Congress never intended it to do and misuses that to allow people to be actually flooded, I think that is inappropriate. And I can suggest for those who are in Sacramento, I am well aware of your area. My brother lives in Woodland. My other brother lives in Meridian. We were faced with floods in '38, '39, and '40. I went through those. My niece got flooded in Meridian this year.

We very nearly got flooded, and a lot of it is because of the lack of maintenance of those levees, especially the one right above our place. It very near the bubble came out, and it was because they had not been able to maintain that levee. And I am not particularly happy right now with the Act as it is in place. We can have our differences of opinion—the gentleman—we are wasting time now. I just want to suggest——

Mr. VENTO. Well, I don't want to——

The CHAIRMAN. Your time is up.

Mr. VENTO. Well, Mr. Chairman, I would feel remiss if I didn't mention coming from Minnesota that the——

The CHAIRMAN. You have a few floods too but not like——

Mr. VENTO. [continuing]—Red River of the north is now——

The CHAIRMAN. The gentleman from—excuse me—the gentleman from California.

Mr. VENTO. [continuing]—many feet over, and we are concerned about floods too.

The CHAIRMAN. I yield to the gentleman from California.

Mr. POMBO. Mr. Chairman, at this time, I would like to ask unanimous consent that our colleague, Mr. Wally Herger, whose area was also impacted by the floods, be allowed to sit on the dais.

The CHAIRMAN. Without objection. Where is Mr. Herger? You shouldn't be standing back there, Mr. Herger. Are you trying to make a grand entrance? Just get up here. We also have—Mr. Radanovich has joined us too, and he is on the Committee. And I welcome both of you. Do either one of you have a statement before we get started? Gentlemen, either one of you want to comment before we get started?

[Statement of Mr. Herger follows:]

STATEMENT OF HON. WALLY HERGER, A U.S. REPRESENTATIVE FROM CALIFORNIA

Thank you, Mr. Chairman, and members of the Resources Committee, for this opportunity to share my testimony regarding HR 478, The Flood Prevention And Family Protection Act Of 1997.

HR 478 restores proper balance to the Endangered Species Act by placing human life as the top priority, ahead of bureaucratic red tape. The ESA was never intended to compromise human life, yet that is exactly what happens each time a levee or other needed flood control project is postponed or delayed because the ESA requires extensive delays for studies on endangered species and subsequent species mitigation projects. The ESA has established mitigation as a priority over protecting human life. We need HR 478 to return the proper balance.

This issue can be summed up in the very real story surrounding the January 2, 1997 levee failure on the Feather River, in the community of Arboga, near Olivehurst, California.

Since 1986, California Reclamation District 784 otherwise known as RD 784, has attempted to complete reconstruction on the Feather River levee system. In 1990, a US Army Corps of Engineers report determined repairs should occur on the Arboga levee as expeditiously as possible, stating, "... Loss of human life is expected under existing conditions (without remedial repairs) for major flood events."

Despite this acknowledgment, more than six years passed before permission was finally granted to begin repairs. Instead of repairing the levee, in the years 1990 to 1996, RD 784 spent more than $10 million on ESA mitigation required by the Corps before the project was finally put out for bid in 1996. When the levee broke, three people were killed, 32,000 were driven from their homes, and 25 square miles of property and habitat were flooded.

RD 784 officials have concluded that, not only did bureaucratically imposed red tape contribute to the levee's failure, but mitigation required prior to construction also undermined the levee's integrity. Even before the levee broke, RD 784 officials argued effective maintenance of levees—namely: clearing brush, repairing cracks, and controlling rodent populations that burrow into levees—conflicted with efforts to establish wildlife habitat. The district also disagreed with a required wetland site they were forced to build within 600 feet of the levee. Because of the soil conditions unique to the levee's location, water from the 17-foot-deep pond was free to seep from the pond to the levee, increasing chances of catastrophic levee failure.

If HR 478 had been in place, this tragedy could possibly have been avoided. No one was surprised by the failure of the Feather River levee. Federal and local officials knew the levee needed structural repairs, but ESA mitigation requirements mandated that, instead of proceeding directly with construction, officials were required to waste time and money on unnecessary studies and delaying mitigation projects. From 1991 to 1994, officials were forced to perform studies to determine what mitigation would be needed for 43 elderberry bushes found on the levee even when the bushes held no evidence of housing even one endangered elderberry beetle. From 1994 to 1995 officials were then forced to plant over 7,500 stems of elderberry bushes on a $10 million, 80-acre mitigation site on the Feather River side of the levee. This mitigation site was eventually washed away in the January floods.

Now, in spite of all they have gone through, residents of RD 784 may also be required to add an additional eight acre mitigation site to their levee project that will cost an additional $200,000.

What really caused the levee to break? It is true that construction on the levee was not scheduled to begin until spring 1997 and spring 1998. According to the Corps, the project was divided into increments with different phases of the project scheduled to be completed at different times along the way. The timeline for these phases, however, was dictated by regulations mandated by the ESA. It was the ESA that mandated all mitigation be completed first, before the contract for engineering work was put out for bid six years after the Corps had determined “loss of human life [was] expected under existing conditions.”

By favoring mitigation before construction opponents establish a policy that levees and similar flood control projects are habitat first, when in fact the primary purpose of levees, according to federal regulations, is to provide flood control in order to protect human life.

The fact is, animals also benefit from a properly managed levee system. When levees fail and flood waters rage, animal habitat is also destroyed.

Mr. Chairman, the facts surrounding this legislation are very clear. Species mitigation delayed construction on the Feather River levee by preempting and excluding all other activities. HR 478 will remove this red tape as an obstacle to saving human lives. This legislation allows us to maintain levees without having to wait six years to perform necessary repairs.

The ESA was not intended to endanger human life. Protecting human life and protecting endangered species are not mutually exclusive.

HR 478 protects human life, it protects animal habitat and it returns common sense to the Endangered Species Act.

Mr. Chairman, the facts are clear. Most of the suffered losses to both habitat and human life could have been prevented. Had proper flood control maintenance activities been permitted and not deferred until losses were already occurring not only would my constituents have saved their property, but they would be alive today.

The CHAIRMAN. In that case, we will bring up our first witnesses. I believe it will be Mr. Brent Hastey, Third District Supervisor, Yuba County, Marysville, California. Mr. Brent, you will be the first witness to appear on this teleconference. Welcome.

STATEMENT OF BRENT HASTEY, THIRD DISTRICT SUPERVISOR, YUBA COUNTY, MARYSVILLE, CALIFORNIA

Mr. HASTEY. Great. Thank you, Mr. Chairman. Thank you for allowing me this time to come before you today. It is an honor to be the first witness in a televised hearing.

Yuba County is in northern California, and it is bounded by the Feather and Bear Rivers and bisected by the Yuba River. Historically, the area has been subject to massive floodflows about every 10 years. Since the 1860’s, there has been a continuous effort to provide and improve flood protection for the area. The early efforts were to build levees and provide flood channel capacity to safely pass floodflows. Later efforts included flood storage reservoirs, and the current efforts are primarily to maintain and restore existing levees and floodways.

Although the levee and floodway systems are manmade tools to protect the resources of the area, overzealous governmental regulators have lost sight of their intended purpose and have dictated that their primary purpose be wildlife habitat. This often has delayed, increased the cost, restricted, and, in some cases, stopped needed maintenance activities.

The Yuba River since the early 1860’s has been impacted by upstream hydraulic mining debris. Although the California Debris Commission was created by Congress to deal with the problem and major efforts were made, the continued downstream movement of this mining debris reduces the lower river channel capacity.

Until about 10 years ago, local aggregate companies each summer harvested sand and gravel from the accumulated river bars. Regulatory agencies either prohibited or made the process so cumbersome that this practice had stopped, and the channel capacity continuously degrades. It now takes three Federal and one State permit to harvest accumulated material from within the floodway.

What was previously done at no cost to the Federal Government will probably now require the expenditure of $3 to $5 million for the government to carry out its obligations under the Federal California Debris Commission Act just to correct the loss of channel capacity from the January '97 flood.

The routine levee maintenance in California is generally carried out by locally funded Levee or Reclamation Districts with limited staff and resources. A number of the districts only have part-time staff and do not even have an office. Obtaining permits and complying with environmental regulations becomes a major and sometimes overwhelming task for these local districts, taking scarce resources that would otherwise have gone to provide essential maintenance to levees and floodways.

Since 1988, there has been a major effort to restore the existing levee system to the level of protection the levees were constructed to provide. This work is not new construction or betterment, but simply major maintenance to existing levees. The environmental assessment for this work identified 43 clumps of elderberry bushes, made up of 1,538 stems that would be disturbed by the levee restoration work. The elderberry bush is habitat for the endangered Valley Longhorn Elderberry Beetle.

The required mitigation before any of the identified maintenance work could be undertaken was to create a 76 acre, $1.9 million mitigation-site. The January '97 floods caused damage to the mitigation-site, requiring $0.4 million in repair. This brings to date $2.3 million for mitigation of 43 clumps of elderberries, or $55,800 per clump, or $1,495 per elderberry stem.

The assessment also included seven acres of emergent marsh. This was due to the fact that when high water is against the levees, some of it seeps through the levee. In Fish and Wildlife's estimation, this seepage creates wetlands that need to be mitigated. Taking this logic to its fullest, one must assume that the 27 square miles of Yuba County that went underwater will now need to be mitigated. Water seeping through the levee at high water is a failure of the flood control system and should not need to be mitigated.

As a result of the '97 flood, the U.S. Army Corps of Engineers has identified several additional levee sections needing major maintenance and have indicated that this work on existing levees will require the development of an additional 69 acres of mitigation.

If the previous cost of $25,000 per acre holds, this will be an additional $1.725 million or a mitigation cost in excess of $4 million to maintain about 29 miles of existing levees. The mitigation cost to maintain 29 miles of existing manmade flood control levees will be approximately $138,000 per mile.

We frequently hear from the resource and regulatory agencies that the ESA does not need reformed and that its problems can be corrected administratively. We have not found this to be true. As an example, the January 1997 California floods resulted in three levee breaks in Yuba County and one in adjacent Sutter County.

Secretary of Interior Babbitt suspended the requirements of ESA so the levee breaks could be expediently restored to prevent further flooding. The resource agencies agreed that the water flowing through the levees could be stopped with minimal consultation. However, before full repair of the levee break was made, the full consultation process would have to take place.

The resource agencies said that mitigation for the substantial habitat loss was not necessary for the levee break, but the impact from repairing the levee break had to be fully mitigated. In spite of these assurances from the Secretary of Interior, as part of repairing the three levee breaks in Yuba County and one break in Sutter County, it is being required that an additional eight acres of mitigation-site, at an estimated cost of $200,000, be provided for closing the levee breaks.

Although the Administration continues to give assurances that the ESA works and any problems can be corrected administratively, the end results show otherwise. The policies of the multitude of governmental agencies implementing the ESA are diverse and independent of each other. Without amendments to the ESA, we see little hope for it ever being reasonably implemented.

As an example, it does not seem justified to require mitigation at a 5–to–1 ratio for maintaining an existing manmade levee that protects not only human life and private and public property, but extensive amounts of wildlife habitat; nor does it seem justified to be required to mitigate for fully closing the hole in a broken levee that cost the lives of three people, the displacement of 40,000 people, and the loss of many hundreds of homes and several hundred million dollars of damage to public and private facilities. We urge your passage of this bill. Thank you for your time to speak with you today. I will be available for questions at your convenience.

[Statement of Mr. Hastey may be found at end of hearing.]

The CHAIRMAN. I thank you, Mr. Hastey. We will continue with the witnesses until we are finished, and at that time, the panel will ask questions. At this time, I would also like to have Mr. Pombo take the Chair, and I will probably be back a little later. I have another appointment. Mr. Pombo, will you please take the Chair?

Mr. POMBO. [presiding] Thank you. The next witness would be Mr. Dante Nomellini.

STATEMENT OF DANTE NOMELLINI, CENTRAL DELTA WATER AGENCY, STOCKTON, CALIFORNIA

Mr. NOMELLINI. Members of the Committee, my name is Dante John Nomellini. I am an attorney from Stockton, California. I serve as co-counsel for the Central Delta Water Agency, which is an umbrella group, speaking on behalf of the local reclamation districts, a number of which I serve as secretary and counsel.

The issue that I see is whether or not we should be imposing environmental restraints, including Endangered Species Act restrictions, on maintenance of existing levee systems, systems that have been in place for many years. These levees were built by our forefathers in accordance with plans. Many of them were built with the help of the Corps of Engineers. They are project levees.

The local maintaining agencies have been given the duty to maintain these facilities. And what we are embarking on right now is a contest between the duty of the local agencies to carry out their functions and the duties of environmental organizations to protect endangered species and other aspects of the environment.

Vegetation, in particular, which, in some cases, involves endangered species—some cases it does not—but vegetation on levees create an additional risk of flooding. It impairs levee inspection. It impairs the ability to react in an emergency.

In the recent flood when we had to put plastic down on the levees and sandbags, we had to put crews in by hand to clear the vegetation out of the way. That takes crucial minutes and hours of time that could be the difference between the levee failure and saving it. Additionally, the vegetation under the water, of course, when the water is up to a high level cannot be removed at the time of the emergency.

What I urge you people to do is remove the environmental restrictions on maintenance of existing levee systems. And I don't think there should be a debate as to what constitutes maintenance. We use the term rehabilitation. Levees sag. They slump and sometimes your repairwork has to actually take the form of widening the levee or raising it somewhat, not necessarily putting it back exactly the same.

But there is no sense to putting our environmental resources in competition with our limited flood control resources. The local districts, as the previous speaker said, do not have the ability to generate the funds to go through these environmental processes.

And I would submit that we shouldn't require the maintenance of existing facilities to be subjected to these obstacles. Let us take our limited flood dollars and see if we can't do the most work we can for the dollar, the biggest bang for the buck. Let us take our environmental regulatory dollars and point them in a different direction.

We would be better off spending money to put habitat off of the levee in reserves or by different policies that encourage landowners to foster the habitat and not put it in competition with our levee function.

Let us take an elderberry bush on the levee. That bush is there. It propagates itself. There is going to be another bush right next to it. We can't work around it. In order to remove it, we have to consult—plant another bush someplace else. Eventually, we are going to have to destroy that elderberry bush. Whether it is in an emergency or part of routine maintenance, we will destroy it.

So our regulatory environmental investment in that bush is going to be gone, and we will have spent thousands of dollars consulting, debating, mitigating back and forth, and, essentially, we are wasting limited dollars at the local, State, and Federal level. Thank you.

[Statement of Mr. Nomellini may be found at end of hearing.]

Mr. POMBO. Thank you. At this point, I would also call on Mr. Norman Yenni.

STATEMENT OF NORM YENNI, SONOMA, CALIFORNIA

Mr. YENNI. Good morning, California; good afternoon, Washington. My name is Norm Yenni. I am a fourth generation farmer in Sonoma County, California. My brother and I farm dryland hay and grain on 2,300 acres of diked baylands along the north shore of San Pablo Bay. The land was leveed off in the late 1870's and has been in crops or pasture ever since.

There are another 12 to 14,000 acres in this area similar to ours used in agriculture. A wide variety of wildlife on these lands have peacefully co-existed with the farming practices for generations.

Since this is tideland, ongoing maintenance of our levees is essential to protect the land from high tides and stormwater runoff. The work is slow and costly, but it is also necessary.

Poor maintenance of levees can result in seepage, overtopping, and even levee breaches. This translates into lost crops, delayed planting, damaged equipment, reduced habitat for wildlife, and could even take human life. Saltwater intrusion can cause crop damage years after the actual flooding event.

Prior to 1980, no one was very concerned about farmers maintaining their property. In 1984, our Soil Conservation Service got a levee maintenance permit for the landowners of the area from the Corps of Engineers. Then in May of 1990, the Soil Conservation Service applied for renewal of that permit. The Corps granted a one-year extension, but the permit itself was returned for more detailed information. And the same thing happened in '91 and '92.

After three years of extensions and reapplications, the Corps denied further extensions, and we felt that the permit may never be issued. In October of 1993, Congresswoman Lynn Woolsey assigned one of her aides to expedite the permit process.

From this point on, the key sticking point was the Endangered Species Act. Specifically, the salt marsh harvest mouse, which may exist in our area, and the clapper rail are both considered as endangered. The U.S. Fish and Wildlife Service declared that we must mitigate for 71 acres of lost species habitat; that being the borrow areas, where mud is excavated, adjacent to the levees.

As landowners, we contend that the borrow areas are the same as they were 120 years ago. Siltation heals and restores the borrow area long before the need to excavate more materials, and the levees have not been moved. Thus, any habitat taken was done years ago, and the impaired habitat has been a static figure. What we are talking about could be termed retroactive mitigation.

Collectively, the farmers of this area provide hundreds of acres of nonfarmed wetlands in the form of ditchbanks and lowlands. Numerous species use our cropland for food and shelter. Our ongoing practice of digging borrow ditches creates tidal flow essential to the health of a salt marsh. Often, borrow ditches are the only channel of tidal flow. They also reduce mosquito populations by draining ponded areas. Our levees and farmlands serve as a highwater refuge to those species living in the berm areas. But none of this negated the demand for mitigation.

The mitigation, which is still in progress today, is to the tune of half a million dollars. All this so we can spend more of our own money to protect our property. The landowners rejected the proposal.

Fortunately, our congressional aide and the U.S. EPA were working behind the scenes looking for a solution. They convinced the agencies and several other groups to pool their resources already planned for wetland enhancement and credit this restoration to our permit mitigation. After five years, that was the plan that we finally settled on.

But as for myself and my neighbors, the settlement came too late. For two years, we couldn't do any levee maintenance. We experienced serious flooding in 1995, most of which could have been avoided. Water coming over the top of our levees flooded two-thirds of our ranch, destroying what crop was planted, and delaying further planting until late in the season.

If we had been allowed to do the type of maintenance which we practiced for the last 100 plus years, much of this flooding never needed happened. If we had legislation such as H.R. 478, this flooding could have been avoided. Levee maintenance must be done on a timely basis. We can't engage in endless negotiation and mitigation to protect a phantom species.

Several government people really went out of their way to make this permit happen, putting in hours of overtime and suffering verbal abuse. Without their help, I don't know that we would have a permit even today. But what we ended up with can set a dangerous precedent. The agencies will claim that mitigation was done. The landowners claim that mitigation was never justified, and we didn't provide any.

This is not how the regulatory process is supposed to work. We shouldn't have to mitigate for a phantom mouse, we shouldn't need congressional help to get a maintenance permit, and the process sure shouldn't take five years. There was little agency consideration given to the beneficial aspects of our practices, the wildlife we harbor in our everyday activities, or the consequences of a denied permit.

Regarding the Endangered Species Act itself, I think most farmers support the original intentions of the Act. As farmers, we need an environment suitable to grow our crops and safe for ourselves to work in. The public has the right to expect meaningful results from the ESA. For all the efforts and all the money spent, and all the conflict generated, I believe the results of the ESA have been disappointing at best.

A lot of what we as farmers do relies on common sense. Federal regulations should be based on common sense as well. I think the public would agree that the American farmer is the best person to protect endangered species, and I know they would agree that we must maintain our levees without delay or added cost. Passage of H.R. 478 will help put some common sense and credibility back into the Endangered Species Act. Thank you for your consideration of my comments.

[Statement of Mr. Yenni may be found at end of hearing.]

Mr. POMBO. Thank you. Dr. Jeffrey Mount.

STATEMENT OF JEFFREY MOUNT, PROFESSOR OF GEOLOGY, UNIVERSITY OF CALIFORNIA, DAVIS, CALIFORNIA

Mr. MOUNT. Thank you, Mr. Pombo, for the opportunity to be a part of this new technology and the application of the new technology. I am from the University of California at Davis. I am a geologist, which is going to give a slightly different perspective than most of the speakers that you will hear today.

And I also want to address the issue of what difference this bill might make from a systemic view of flooding. And what I will say at the outset is I doubt that this will make a significant difference in flooding in the Central Valley. And, again, I take the systemic view—the regional view. Let me give you some examples.

I think there are—I have given you in my attached testimony literally an academic laundry list of my views on this. And I can boil it down to a few comments. I think one of the things we have to keep sight of is the lessons learned from this flood and how it might apply to this bill. Let me start with the first lesson.

Lesson number 1, it is an immutable fact that we cannot prevent flooding in the floodplain of the Central Valley. It is a floodplain by virtue of the fact that it floods. And as was shown this winter and will be shown in winters in the future, we cannot, despite our herculean efforts, prevent flooding.

Unfortunately, seven out of ten Californians believe that we can, and it is built like this, particularly with a title that starts with the Flood Prevention Act that actually leads people to believe that. We cannot prevent it.

I think the second aspect that we need to learn which is relative to this bill is that levees fail. Levees fail both figuratively and literally. First of all, levees, by virtue of the way they change the basic hydrology of a river, are the source of their own undoing. And I can go into a lengthy academic description of that. Levees have a nasty habit of tearing themselves down because of the change that they make on rivers. But in the long run, of course, we are lulled into a false sense of security.

That actually brings me to the third part of the lessons learned that I think we should keep track of. It is my belief that we are locked in a vicious, if you want to call it, cycle of serial engineering. And I see that this bill does not do anything to get us out of that cycle of serial engineering.

Let me explain what I mean by this. We erected levees in Central Valley basically to allow farmers to get into their fields earlier in the season. Eventually though, we became dependent upon those levees as a source of protection for urbanization, urbanization which is rampant right now in the Central Valley. There are more than 20 new communities proposed in the Central Valley. At least half of those were under water in the last flood.

What happens is we become dependent on those levees, and we assume that they will prevent flooding, but they won't. Flooding will occur; the levees will fail. Even the best engineered levees, which would have nothing to do with this bill, will fail and flooding will occur.

And then, naturally, like now, there will be a call for new structures, new laws, tinkering with new laws which will really, in reality, have only cosmetic local effect and do not address the systemwide or systemic problems that cause flooding in the first place. But, unfortunately, when we come to the end, we will say we have done something, and we assume we are safe. And what that does is it just stimulates the cycle of growth again on the floodplain.

That is our cycle of serial engineering, which is exacerbated, I want to add, by the fact with our immutable capacity to forget that we had floods. I want to tell you, and I am sure you know, that by September we will be talking about water supply and not flooding because we tend to forget in about six months. I think General

Galloway called it the flood memory half-life effect, and it plays a major role in flood engineering.

So we have to break out of this cycle of serial engineering, and, unfortunately, I don't think this bill does anything toward that. And, basically, what we have done is we have asked too much of our floodplains. That is where rivers store water during floods. That is the mechanism that rivers use to actually manage their own flood. And levees, when placed right against a river, divorce the river from its floodplain.

I think the steps that we have to take in the future, and as I say in the attached testimony, you will see I have got a long list of these things. Most of these deal with actually looking at a watershedwide basis—taking a watershedwide look, not local look, toward flooding. That is really going to be the best approach in the long run and cost the least in the long run.

I am not criticizing or addressing the Endangered Species Act in particular, but what I am cautioning is both by title and deed in this particular bill we are not really going to solve any significant flood problems in the Central Valley. And I thank you for your time.

[Statement of Mr. Mount may be found at end of hearing.]

Mr. POMBO. Thank you. Mr. Robert Clark.

Mr. LEE. Congressman, it is Christopher Lee.

Mr. POMBO. Oh, I have got the wrong one. Yes, excuse me. Mr. Christopher Lee.

STATEMENT OF CHRISTOPHER LEE, TRUSTEE, RECLAMATION DISTRICT 556, WALNUT GROVE, CALIFORNIA

Mr. LEE. Good afternoon, Congressman, and members of the panel. If I can just take a second to take issue with the good professor to my left. Those of us that are actually involved as trustees in maintaining these levees are not just about to rip up 100 years of history and move out of the valley. This is where our homes are. They have been unflooded for 100 years, and the systems work pretty well. And begging the question, so to speak, on this issue that levees fail doesn't do a thing for us as we are discussing this this morning.

What this hearing I hope is about is taking responsibility on the part of the United States Congress. In 1973, you passed the Endangered Species Act. As was said today, it was a good idea. We don't like farmland being paved over. It is not conducive since there is only so much of it.

On the other hand, with the passage of the regulations that I have here, and I urge you all to read these regulations promulgated to enforce the Endangered Species Act in 1986, these regulations are an absolute recipe for disaster. They are an excuse not to get things done, and that has been the general effect.

I speak as a trustee on Reclamation District 556 located on the Sacramento River, and which during the 1997 flood, we had a levee in danger of failing. The Corps of Engineers appeared on the scene by helicopter. We negotiated the deal in five minutes, and in three days they spent $650,000 to fix 2,600 feet of levee. It worked very well, and, of course, the Endangered Species Act was suspended.

The contrary example is Reclamation District 348 located 30 miles south of Sacramento, Thornton, California, that flooded in 1986, closed Interstate 5, and was generally a mess because that levee failed.

That reclamation district, using State funds, applied to get the levee rebuilt. It took them eight years—not eight months—eight years and five Federal and State environmental agencies, as Mr. Nomellini has stated, all competing with each other to who could have the most extreme environmental view, making the district put up signs, put up fences around elderberry bushes—that kind of nonsense.

Now, did this have anything to do with good flood management to maintain these structures that are flood control structures? Absolutely not. All they did was enter into a contest with Federal and State bureaucrats doing what the law said they could do, but they took no responsibility for the safety of the people behind these levees.

These levees are no different than California freeways. Freeways protect the public for public transportation. These levees protect the public by keeping water off homes, farms, businesses, and residences. And until you have ever fought a flood like we did in '97 working 22 hours a day, you don't even have a concept of how extreme these problems become.

But why should we allow—and in my written comments I attach a letter from the U.S. Department of Interior, Fish and Wildlife Service, to the Corps of Engineers during this eight-year period of nonsense in which the Fish and Wildlife make outrageous demands on this district.

To give the Committee an example, we maintain my district in Walnut Grove—we maintain over 10 miles of levees. Our tax budget on our local landowners is only $35,000. Now, we maintain these levees for the benefit of the water highways which transfer water for Federal and State water projects to central and southern California. The public gets a huge benefit.

What we don't need, and where this thing has absolutely gone to Alice in Wonderland—a good idea gone bad, and the good idea was we are going to protect the environment, and then we are going to apply that law to public agencies doing the public's work.

Now, in California, when we lose the Oakland Bay Bridge or the Century Freeway, we get right on it and fix it like we did the levees. But why do we have to operate under a system where we close the barn door? We have a great deal of government concern to the poor people that are flooded out and the animals and endangered species that are killed. Why don't we fix this ahead of time? Get the Federal Government off our back so we can do our job. Thank you.

[Statement of Mr. Lee may be found at end of hearing.]

Mr. POMBO. Thank you, Mr. Lee. I appreciate the testimony of all the panelists. Mr. Hastey, you testified that—in your testimony it says that since 1988 that there has been a major effort to restore the existing levee system and go on to identify what the mitigation was for the elderberry bushes in that area. What length of time did it take from when the project was started before the work was actually completed?

Mr. HASTEY. Well, the work actually hasn't been completed, Mr. Pombo. The work was actually ready to start this spring after we had finished the 76 acres of mitigation that was required to be done before we could start the construction on the actual work on the project itself. Where the levee broke was scheduled for June to start to repair the levee.

Mr. POMBO. So you are testifying that the work or the project that was begun in 1988 has not been completed yet, and that the additional work that has been outlined by the Army Corps of Engineers will cost the district an additional $4 million in mitigation. Will that delay the work that has been set out by the Army Corps to be done—the additional costs that——

Mr. HASTEY. I don't think that the work will delay the work that is now being done. What has happened in the past is that we have been required to do the mitigation work. And what we were told by under the '86 Flood Act is that we were required to do the mitigation before we could do any of the contract work on repairing the levees. The Corps has now told us that we will be able to do the repairwork and then mitigate after the repairwork is done. They have changed the rules at this point because of the emergency.

But the levee broke in '86. They were repaired in '88. We started doing the planning. We were told that we had to mitigate for those 43 elderberry bushes, and that work had to be completed before they could start any construction or reconstruction on the levees themselves.

Mr. POMBO. So the work that is scheduled—that was begun in 1988 is scheduled to be done this year?

Mr. HASTEY. Yes, sir.

Mr. POMBO. Thank you. Mr. Lee, in your experience in maintenance of the levee and repair of the levee system, it has been said that there are currently exemptions within the Endangered Species Act that in a time of emergency that work can be done. In your experience, is that sufficient to allow you to properly maintain the levee system?

Mr. LEE. Absolutely not. Good planning and good maintenance is something that is an annual and ongoing event in the Sacramento delta, and I assume for other California levees. The exemption after the damage is done doesn't do anybody any good. You are spending a lot more money; people are disrupted; their lives are ruined; their businesses are ruined. In the exemption, everybody feels sorry for them, and they come in.

Good maintenance is done every year on all parts of the levees and that this is not rocket science. You plan for the flood five years from now. You plan for the flood 10 years from now or 20 years from now, and you don't do it at the last minute when the water comes up. You go out there and fix the levees and repair the levees as part of good government. Making us study it to death is bad government.

Mr. POMBO. Dr. Frost testified in his statement—excuse me—Dr. Mount testified in his statement that people forget, that they have short-term flood memory; that when it is wet, people pay attention to that, and when things begin to dry up, they begin to forget that.

Mr. Lee, knowing that as you do to be the case, what do you think is going to happen in the very near future when we are talking about there not being enough water in the Central Valley with these maintenance programs that you have been undertaking over the past several years?

Mr. LEE. Well, Congressman Pombo, we remember so well in the Walnut Grove area where one island after another was either close to flooding or did flood, and a bunch of houseboats were up against our bridges. We had 40 television cameras, and as soon as the crisis left, the television cameras disappeared. That seems to be a common experience today.

Our problem is that we cannot—if we analyze or look at a necessary repair as we do now after the '96 floods, all these levees need repaired. Now, are we going to identify the problem, get it properly engineered, and do the work? Are we going to identify the problem, apply to the Federal Government, have five Federal and State environmental agencies compete to who can work us over the most, and then try to get the project done in 10 years? As I illustrated, we fixed a levee in three days a half a mile, and it took Thornton, California, District 348, eight years. Now, this kind of nonsense has got to stop.

Mr. POMBO. Thank you. One final question for Mr. Nomellini. Mr. Nomellini, do you feel that the implementation of the Endangered Species Act, as it is currently being implemented, played any role at all in the recent flooding that you experienced in your area?

Mr. NOMELLINI. Yes, I do and I think the role that the Endangered Species Act played is that of an obstacle to channel maintenance and levee maintenance. There are levees that would be in far better condition today and channels had the Endangered Species Act not been applied. They were designed—these facilities were designed to sustain certain flood stages.

And, as testified many times by others, vegetation in the flood channel, vegetation on the levee obstructs the flows. The water is higher in the river than it would have otherwise been. And, of course, on the levee, it is more difficult to maintain.

It is very difficult to tell why a particular levee fails, but there is no question that the Endangered Species Act, which is part of a package of environmental restraints, has resulted in less maintenance, less efficient flood control systems, and a squander of valuable limited resources both on the environmental side and the flood control side.

Mr. POMBO. Thank you. At this point, I would like to turn to Mr. Dooley for his questions.

Mr. DOOLEY. Thank you, Mr. Pombo. I guess in listening to the majority of the testimony, it seemed like most of the witnesses were commenting on the inability or the difficulty in maintaining levees which resulted in increased incidents of flooding in this last event that we had in California.

I guess when I look at H.R. 478 though, I am a little concerned in terms of its breadth and its scope because it appears that it could go even beyond just the operation and maintenance of levees because it includes also a statement which would allow for the building of facilities in order to prevent flooding.

And I am a little concerned that even while I am one who totally supports, you know, the exemptions for operations and maintenance of ongoing maintenance of levees, I would be interested to hear from some of the members of the panel, do you believe that we should exempt the major construction of new facilities from the provisions of ESA?

And, in fact, in some interpretations of H.R. 478, which we are considering today at this hearing, would even say that you could even put the building of the Auburn Dam in this—being exempted from many provisions of the ESA under this legislation. And I would just be interested in hearing from some of you. Do you think that would be appropriate?

Mr. LEE. Congressman Dooley, perhaps I can help you out on this. The California legislature is ahead of Congress in this matter. This week the Assembly passed Senate Bill 181 by Senator Kopp of San Francisco, and they have exempted the Endangered Species Act as it applies to California by State law for a period of two years. And this bill is going to pass out of the California legislature by the Assembly bill. It was voted bipartisanly 72–to–1 out of the 80-member Assembly.

Mr. DOOLEY. So just to clarify, are you saying the California State legislature passed legislation that would exempt the construction of dams from any California ESA actions?

Mr. LEE. Well, I should have finished. They exempted the San Francisco Giants ballpark and the levees. OK.

Mr. DOOLEY. The levees.

Mr. LEE. And the levees were included as a bipartisan measure. I don't know how you want to clean up this language here if it needs cleaning up, Congressman Dooley. But what the panelists are talking about today are maintenance of existing structures, some of which are over 100 years old. And that is my position as a farmer and an attorney and a trustee. We have got to be able to fix these flood control structures.

I might add something though. We have another problem that this bill does not address, and it does no good to fix the levee and strengthen the levee if you don't dredge the rivers because, as Senator Feinstein personally observed during the '97 floods, the Sacramento River at Rio Vista—its bed has been raised four feet in the last 10 years. Well, you can have the strongest levee in the world if you don't go back to dredging, and this is a continuing problem.

Mr. DOOLEY. I would just go on to say that I think that just in all honesty, just for some of you in terms of achieving your ultimate objective, if we don't, I think, further limit the scope of some of this legislation that it is going to have a very difficult time passing.

And I would say that there is an alternative that has been introduced by Congressman Fazio, as well as co-sponsored by a number—myself and also Mr. Condit, that does try to limit this exemption as it relates strictly to the operation and the maintenance that is required to maintain the integrity of the levees and also enhancement to those levees. And I think that is something I hope you will consider because even in the political environment we have in Washington, I think something that goes much beyond that is going to be very difficult to achieve.

Mr. POMBO. Thank you. At this time, I would like to recognize Mr. Herger if he had any questions at this point.

Mr. HERGER. I do. Thank you very much, Mr. Chairman. I do appreciate you having this hearing. My district was one that all 10 of the 10 counties I represent were declared disaster areas. The flood in Yuba County, of course, that inundated all of Yuba County is also my district.

And I would just like to, before I ask a question, just respond to a couple of the comments that were made. One is that the intention of this bill is to do nothing more than to be able to go in and repair our levees and make sure we have an integrity within the levee system that they were originally designed to complete.

The goal of this legislation is not to build new reservoirs. I personally feel that we need to do that, but that is not the intention of this legislation, and certainly that can be defined as we go further into the process.

I would also like to comment on Mr. Fazio's bill, which was just mentioned. Even though that is legislation that would be helpful with this disaster, regrettably, it is limited to this disaster. It will not help us prevent future floods. It will not help us do the type of things that we need to maintain the levees that we need to maintain in years to come. So it is, therefore, very shortsighted. And even though I support the Fazio legislation, it will only help us during this immediate disaster and does nothing for us in years to come so, therefore, again, I believe we do need this.

Just as background, and I would like to ask Mr. Hastey a question if I could. And, Mr. Hastey, if you could comment on this. We had, as was mentioned, this process, and the reason for this legislation is that the process of repairing these levees were identified as far back as 1988, some nine years ago.

Some studies were done. In 1990, the Corps of Engineers came out, and they wrote a document, and I want to quote from that. In their 1990 document, the U.S. Army Corps of Engineers reported and determined that repairs should occur on the Arboga levee as expeditiously as possible, stating—now, this is on the very levee and the very spot that broke in which three lives were lost, plus millions of dollars of damage and thousands of acres were inundated—"From this 1990 study,"a study done some seven years ago, "loss of human life is expected under existing conditions without remedial repair for the major flood events."

So this is something we identified in 1988 that needed to be repaired. A study was done two years later in which the Corps of Engineers themselves predicted what actually happened, and that was that there would be loss of life. We are still now—yet in January 2 of 1997, this year, that levee had still not been repaired because of environmental hoops that had to be jumped through. And we have three individuals that lost their lives, plus that.

Mr. Hastey, if I could ask you, can you explain the mitigation requirements that were mandated for this levee before these construction efforts were allowed to begin? And how many acres and how much money was spent on this?

Mr. HASTEY. Certainly, Congressman Herger. There were identified 43 clumps of elderberry bushes. And when an elderberry bush is checked on by the Fish and Wildlife Service, they then go through the process of measuring every stem. And every stem that is over one inch is required to be mitigated. They identified 1,538 stems on elderberry bushes. To mitigate it, they ripped out 76 acres of prime production peaches that were in production and planted 76 acres at a cost of $1.9 million.

They planted the elderberry bushes' stems at a 5–to–1 ratio. Not only did they plant the bushes at a 5–to–1 ratio, but they removed 25 of the grown elderberry bushes and replanted them inside the riverbottom inside this mitigation area. It came to a cost of $55,800 per bush to mitigate for these stems for an Elderberry Beetle that has never been sighted north of Stockton.

And when you talk to Fish and Wildlife and you talk to the Corps of Engineers, we would ask the Corps, "Why are we doing this?" And the Corps would say, "Because it's not worth fighting with Fish and Wildlife over this. It is just better to go spend the $2 million." And we would rip our hair out, and we would build mitigation-sites instead of fixing levees that protect people's lives.

Mr. DOOLEY. Thank you. Do you know how much money was originally expected to repair this particular levee? Mr. Hastey, I don't know, are you aware of the amount of money that the original construction of repair for this particular levee was placed at?

Mr. HASTEY. If it was placed into just that section of levee, probably the best fix would have been a slurry wall. Slurry walls amount to about $4 million a mile. There is probably about a three-quarter mile stretch there so it is about $3 million to fix that stretch of levee.

Mr. DOOLEY. And yet there were some 8 million or more that was spent during this period of time just on litigation on this berry bush, and in the process, we have spent far more money, probably more than double the amount of money, just on mitigation——

Mr. HASTEY. Right.

Mr. DOOLEY. [continuing]—some eight years later and still do not have the levee repaired. And yet we ended up losing three lives. And I believe that for itself speaks for the absolute necessity of this legislation and also speaks for the fact that we cannot come up with just a temporary fix that only fixes this for this disaster. We have a responsibility as Members of Congress to come up with the type of insight and the type of leadership that will help prevent this type of incident from not happening again. Thank you. Thank you, Mr. Chairman.

Mr. POMBO. Thank you. At this point, I would like to recognize another Californian, Mr. Sam Farr.

Mr. FARR. Thank you very much, Mr. Chairman. Perhaps this question goes to Mr. Hastey. As I understand it, levees by definition are manmade. We have two types of levees. We have Federal levees that are maintained by the Corps of Engineers, and we have other levees that are maintained locally. The levees in question, are they federally maintained levees?

Mr. HASTEY. To my knowledge, Congressman, there are no federally maintained levees. Levees in the State of California are maintained by the local levee districts, and this happened to be maintained by Levee District 784.

Mr. FARR. Do those levee districts have a maintenance plan that has been adopted and funded?

Mr. HASTEY. They have a maintenance plan that they have adopted, and they have an assessment that is given to the property owners. The property owners pay the tax for the maintenance on the levees.

Mr. FARR. Is that assessment adequate to do the maintenance requirements in a continual process so that they can maintain them in a timely fashion?

Mr. HASTEY. It is. When you consider what maintenance is in the State of California, I think you need to go to—reclamation districts are much like your garden person who is taking care of your lawn. And I will use this definition.

The State of California owns the levees in California. The Corps of Engineers was the general contractor who built them. The levee districts maintain them, check them for squirrels, mow them, and burn them. They do not do major maintenance. They are like your landscaper who comes to your lawn. The engineering work and the ownership is held by the State of California.

One of the major problems in our State is when there is a disaster, we call on these levee districts who have been doing maintenance. We call on the kid mowing the lawn to fix the problems that the owner should have seen long ago.

Mr. FARR. Well, that is what my point is. I represent some of those districts, and what I have seen in the process is that they have not either adequately assessed themselves, or they have refused to do the maintenance work. And then a flood comes along, and the blame goes around, and it ends up the ESA is the one that the people like to blame.

On my own time, Mr. Chairman, what I am suggesting is that this issue needs to be addressed in a management fashion. You are talking about managing a water system that has awkward jurisdictional governance. It is not something that one government owns, and one government can fund, and one government can plan for.

This bill, I think, goes far beyond that process because this bill relates to the building of dams, to the operating of dams and rivers, to the repairing and maintenance. And I think what the whole testimony we have heard here today about is the maintenance of levees. The majority of those levees are not even controlled by the Federal Government.

And I think that what we ought to be focusing on with this legislation is a maintenance program that allows a proper maintenance with all the agencies having to be on board with one plan. When we have that, we operate well in these jurisdictions. And, in fact, many areas in my district have been able to operate under these laws without problems except for the lack of funding—sometimes blamed on the Federal Government; sometimes blamed on the local.

We have one river where the north side of the river is in one county, and the south side of the river is in the other county. They have two different assessment districts, two different boards of supervisors to deal with, a special district on one side, upstream by two other counties, and nobody can get along, and we can’t adopt a maintenance plan. But that is the problem. It is not just the Endangered Species Act that I think people are trying to attack today.

So I appreciate the testimony from Sacramento. I sat in that room many times in my career in the legislature, and I would suggest to this Committee that you just heard from the witnesses at the California legislature, which is right on top of this problem.

In dealing with it, they limited their legislation to levee maintenance, and they did it for a two-year moratorium, essentially, on the ESA to get the levees from the last storm back in. They did not go as far as this bill does to providing exemptions for building and operating dams. So thank you, Mr. Chairman.

Mr. POMBO. Thank you. At this time, I will recognize Mr. Billy Tauzin.

Mr. TAUZIN. Thank you, Mr. Chairman. I am Billy Tauzin from Louisiana where we know something about levees. If we didn't have levees, most of us could not survive in my district in southeast Louisiana. I am shocked, frankly, by some of the testimony I read and hear today and by some of the documents in front of me. I particularly refer to your submitted testimony, Mr. Lee.

I have gotten in my hands a copy of the "Policy Guidelines and Regulations for the Mitigation for Levee Construction, Maintenance, and Repairs" for the Sacramento district of the U.S. Army Corps of Engineers. Look at this thing.

And when I read the statement of Mr. Lee and the actual letter from the Corps of Engineers detailing the mitigation requirements to make a simple repair in the west bank of the Mokelumne River near Thornton in San Joaquin County, California, I am astounded.

This report by the Corps says before you can fix that levee, because you are going to possibly hurt some Elderberry Longhorn Beetles, who are dependent upon the elderberry, that you had to go out and identify all the elderberry plants of a certain dimension in a one-third-of-an-acre area. You have got to mitigate by 5–to–1.

You have got to transfer a title to the mitigation area to either some resource agency or a private conservation authority, and you have got to fund that private conservation organization in perpetuity to permanently maintain that new area.

A qualified biologist has to be on board all during this process; written documentation requiring that on an annual basis other plants are manually picked up so they don't disturb the elderberries; that permanent fencing has to be provided; permanent signs; two or three species of other plants have to be planted for every five elderberry seedlings; monitoring by qualified biologists annually with annual reports on December 31 identifying with maps where individual adult beetles have exited holes in elderberry shrub, and elderberry plants have to be analyzed; survival rate condition; real and likely future threats have to be identified; field notes; photographs; all on-site personnel receiving instructions regarding the presence of the Elderberry Longhorn Beetles, et cetera.

It seems like the agency is spending a great deal more time making sure that this mitigation-site is maintained than anybody is concerned about fixing the levee. And all of this cost has to be borne, I assume, by the owner of the levee. Is that correct?

Mr. LEE. That is correct, Congressman. The routine maintenance that—and as Mr. Nomellini said earlier, this becomes a contest between the environmental staffs of the Federal and the State agencies to see who can come up with more absurd requirements, and their backside is covered because all they have to say is, “We are following the 1986 regulations,” which are even sillier. And——

Mr. TAUZIN. We had to do it because of this book. Right?

Mr. LEE. That is correct. So all the staff people that are making these ridiculous demands, they are covered. Now, this is why I feel so strongly about this, that Congress has to take the lead—not the California legislature, but Congress. Everything starts——

Mr. TAUZIN. Now, let me ask you something because time is limited. It is my understanding that whoever owns the levee, whether it is a Federal levee or State or local levee, that when repairs are due and maintenance is required on that levee that you still have to go through 404, and you still have to be subject to the Endangered Species Act requirements. In other words, before you can get help or before you can maintain or repair that levee, you still have to go through this process. Right?

Mr. LEE. Except in catastrophic emergencies such as 1997.

Mr. TAUZIN. Right. You are given an exemption after the event. But even after the event, you still have to restore it to the conditions that existed before, which means you got to go do all this mitigation again. Right?

Mr. LEE. If it is the secondary drill controlling the main function of the project.

Mr. TAUZIN. Now, here is an extraordinary thing I have learned too today, and that is, before you can get Federal help to fix any levees so lives are not lost and people’s property is not destroyed while the riverbed is rising, before you can lift the levee or maintain it or repair it, that you have to sign an agreement assuming liability with the Corps before they will come in and help.

And then if the Corps delays, if the Corps fails to fix it right, or they put in a mitigation requirement that somebody in court believes contributed to the failure of that levee, such as a mitigation bond, all of a sudden you find yourself in court having assumed the liability for the Corps’s failure or the Corps’s actions.

You are in court now potentially liable to those citizens because the levee failed for lack of maintenance or because of a mitigation project that may have contributed to its failure. Is that correct?

Mr. LEE. That is correct.

Mr. TAUZIN. That is absolutely—it is absolutely astounding. Those of us in Louisiana who depend upon levees are getting real concerned that maybe we need some national legislation. Thank you, Mr. Lee.

Mr. POMBO. Thank you. The Chair recognizes Mr. Miller.

Mr. MILLER. Thank you very much, Mr. Chairman, and thank you to the panel for your time and your expertise. Dr. Mount, if I might, a lot of discussion here on the ESA and its implications, and I think much of it very valid in terms of mitigation and repair of levees. But let me ask you, if I read your testimony correctly, we can set that argument aside.

We still have a fundamental problem in the State of California with respect to the management of these rather extreme hydrological events, and you seem to suggest that if we continue down the same vein that we have continued over the last 50 years, that our future doesn’t look much brighter than the events that we have experienced in the past. Is that a fair characterization, that we have got to start thinking about some other management tools and other means of providing relief on these water courses?

Mr. MOUNT. Yes. Mr. Miller, thanks for bringing that up. I appreciate it because in all this discussion, I haven't heard any discussion about how we are going to reduce flooding in the Central Valley. This bill doesn't make any difference at all because every time a levee failed in this valley, it saved other levees. It prevented failure on other levees.

So what you are essentially talking about is translating the problem somewhere else, not actually addressing the flood control problem. And that is one of my big concerns. And in this particular bill, it does nothing to help people get out of harm's way. In fact, it stimulates growth in harm's way. It doesn't address the fundamental issues. And actually, I expected at some point to hear some testimony about that, and I have not.

Mr. MILLER. Let me ask you this. And I don't know if you can answer it, but I think it would be very helpful to the Committee and certainly in terms of our long-term planning, when you look at current water courses and river paths and various floodplains that are available, is it your opinion that we have the ability to construct some alternatives in terms of relief during these events other than just simply building the levees higher and higher as we have done in the past? I mean, do we have places where we can provide strategic relief and anticipated relief to manage these events?

Mr. MOUNT. Mr. Miller, we are at a crossroads here. We are fast closing the window on options. We will eventually—if we do not slow the rate of growth on the floodplain, we will close off all our options. I am not advocating that we should be moving people off the floodplain and relocating whole cities, but we still have time and we still have the space to maintain ag land and wildlife habitat as a way to manage floods.

Again, this bill does not address any of that issue, but it is the most compelling and most important issue. This window is coming to a close. If we don't act now within the next few years, we will have lost all our options.

Mr. MILLER. So in a sense, we have been in a little bit of a catch–22 here, that we have built the levees stronger so people who have moved into more of the floodplain and some of those areas you look at north of Fresno and elsewhere or almost anywhere in California now, unfortunately, and they have relied on those levees.

But at the same time we are reducing some of the options that we would have available to us in terms of planning for these future events. I mean, so we are kind of in a vicious circle here. I mean, is that what you are saying? I don't want to put words in your mouth. I am good at that but——

Mr. MOUNT. Trust me, I have plenty of words of my own. Yes. What I call it is the cycle of serial engineering, that we are basically locked in this cycle. As long as we continue to erect new and higher levees, we will never break out of that cycle.

And, look, the Army Corps themselves have pointed out that we are locked in this cycle. The Army Corps is usually pointed as the bad guy who builds lots of levees. The Army Corps has said, "Look, we have to back off. We have to cut out this overdependence on levees as the solution to flood control because they don't work. They are an untrustworthy ally."

And I think that is a message that is lost in all of this, and, again, I want to reemphasize, we are losing our options very rapidly by the rate of growth that we have here in the Central Valley. And when we turn over prime ag land and pave it over, we have lost it as an option for flood control. Again, I didn't hear it.

Mr. MILLER. Well, I want to just thank you very much for your—my time is about to run out—thank you for your testimony and for the thought that you have put into this. And I must say that I am encouraged. I know that Congressman Condit is working with groups down in his area, which is among some of the highest growth areas in the Valley.

And some of the statements, I think, by the governor have been encouraging in terms of our ability to look at some of these options in the future so that we have some opportunity to try and—it doesn't appear that we can prevent floods, but we may be able to have some enhanced ability to manage these episodes in a much less destructive and tragic manner. Thank you very much for your testimony.

Mr. POMBO. Mr. Gilchrest.

Mr. GILCHREST. I thank the gentleman for yielding, and I also want to compliment Mr. Pombo and Mr. Herger for bringing this issue to the level that I think is necessary in order for us to make it a priority to understand the full ramifications of what we are doing.

Sort of continuing on the line of Mr. Miller's questioning, I almost feel compelled to ask if dolphins have any impact on these levees. Mr. Miller didn't hear me say that so we will just move along.

I guess 100 years ago when these levees were constructed, they were constructed for the purpose of trying to settle this region, protect the residents from harm, from floods, from flood damage, property damage, lives, and all those other things. But I would also guess from the comments that I have heard here this morning that in the last 100 years, and probably especially in the last 10 years or so, we began to understand a little bit more about the mechanics of natural processes.

And it seems through the testimony, especially from the testimony of Dr. Mount, that it seems that no matter what we do, and correct me if I am wrong, no matter how rigorous the engineering design constraints, according to your testimony, that the best levees will fail.

And if I could read one other sentence, "The predictable failure of levees also stems from the manner in which they are applied. Levees, more than any other flood engineering effort, failed because they usually conflict with rather than conform to natural river processes."

I think what we are trying to wrestle with here is figuring out if we can maintain existing levees without a great deal of conflicting of bureaucracies to do what we know is right to do under the existing structure but then move on from that.

And my question, I guess, Dr. Mount, is there a limit to the capacity of existing water resources to sustain human population increases? Is that going to happen? And that is whether it is flood control or drinking water supplies to all the various communities downriver. At what point do we reach the point where we have exceeded the capacity to save lives and to give people drinking water? Have we reached that point now? Will we reach it in 10 years? 20 years? Dr. Mount?

Mr. MOUNT. I think that is actually a monstrous question in that here in California we have 1,400 dams. We have almost 6,000 miles of levees. And despite all that, at present, we cannot prevent flooding in California. And we can't simply afford to prevent flooding in California. So in answer to part of your question, in many respects, we already have exceeded our capacity when it comes to something like flood control; that is, we cannot control the flood.

As for water supply, that is a whole separate issue, but it is, as you might expect, enmeshed in this overall issue as well. And, again, it would take me a long time to address that. Currently, there is enough water to sustain the population here in California. We are squabbling over it a great deal at present.

But in terms of flood control, I think the evidence was here on January 2, 1997, that we have exceeded the capacity of our system. We cannot engineer flood protection so that it is foolproof. And we are fooling ourselves if we think otherwise.

Mr. GILCHREST. Could one of the other gentlemen or any of you, understanding this data, this information, understanding, I guess—we understand here in Washington that we have got to maintain those levees, and we want to expedite the process to make sure that that is done. Is there any thought of future managed growth techniques as a result of past flooding? Would anybody like to address that issue on the panel?

Mr. NOMELLINI. I will take a crack at it—Dante Nomellini. I think there is room for more planning. I think use of the floodplains for shock absorber capability in the flood is a good idea in some places. I think dams still have a value for flood control. There is a degree of benefit to a number of opportunities, and we should look at the planning issue.

While it is true that there are no absolutely failproof levees, just like there are no absolutely failproof bridges or highways or rockets that go to the moon, that should not deter us from trying to minimize or lower the risk of failure of our existing structures.

So we should make sure that we are doing the best we can with the dollars we have to maintain the facilities that have been designed and are in place, and then we should separately look at what we could do to enhance our capability. And this floodplain idea, I think, is a good one. I think, too, on the water issue we may have exceeded the capacity in California to serve all of our constituents and feed them at the same time.

We have a conflict between agriculture and the urban areas, but those are broader issues that I think should be addressed, but they should not detract you from the task of trying to keep us from foolishly spending our limited dollars at the local, State, and Federal level of having our environmental interests compete with our flood control interests where we have a duty to maintain the existing facilities. We don't have a choice. We can't walk away from that. Thank you.

Mr. GILCHREST. Thank you, Mr. Chairman.

Mr. POMBO. Thank you. Mr. Vento.

Mr. VENTO. Well, thanks, Mr. Chairman. I was reading some of the background material here, and it commented that after the '86 floods there were—which these particular projects that we are talking about here in Sacramento and San Joaquin delta—there is over a thousand miles of levees in this area. And so they, obviously, as has been pointed out, for 100 years have been important.

But the issue was that much of the repairwork had been done except on the Marysville and Yuba City area, and it had been started there, and that the contention, obviously, concerning this, that there was some delay with regards to the giant garter snake or something when it was dormant, but that there was also some lawsuits and other things that were involved in terms of protests over the bidding, which I think we are going to hear about later in the testimony from the Department of Interior. The question I have for Dr. Mount is was this '97 flood an unprecedented hydrological event?

Mr. MOUNT. This was truly, in my view, a regional flood of this century. That does not mean it was the 100-year flood. That is actually a statistical best guess. But it certainly was a large event. But if you think back over the last 10 years—10-12 years in California, we have seen at least three significant events here in California, and that should be our road map to the future, that, in fact, these events are going to come.

Now, it may be that for the rest of my lifetime I don't get to see a flood like this. But it also equally may be that I will see another one next winter. The odds are just the same. So I think we have to keep in mind that although this was a large event, it certainly wasn't unprecedented.

Mr. VENTO. Well, I think the issue here too is is this a common problem? For instance, I notice that one of the witnesses, Mr. Nomellini, pointed out that a lot of environmental laws get in the way of this. I mean, it comes to my mind to me that I assume that these levees are for flooding, but there are also other reasons that they are put in place—principally flooding, but, I mean, there are other benefits.

When they do feasibility studies, they try to add up all the different benefits that are going to occur so some of them might be in terms of protection of various types of endangered species or recreation or other types of uses that occur in terms of the feasibility studies. These are important. If we are going to take away those particular values here, then you subtract them in terms of how you look at the report.

But there was a study done in 1994 by the Floodplain Management Review Committee, which was chartered by the Administration's Floodplain Management Task Force, an independent review, of the '93 floods. And they did not find that the Endangered Species Act or other events were the reason for the problems. I don't know all the reasons they found, but they didn't identify that.

They did find it was the result, again, of unprecedented hydrological and meteorological events. And we are having a couple of those in Minnesota right now on the Red River in the north, as a matter of fact. And it is flat up there, and that is a problem that we are also having in my district. But the Mississippi River Valley in St. Paul, Minnesota, is a little wider. And so we can accommodate there, and we have moved a lot of things off the river, and they have breached the levees in our area.

So the concerns are I think multiple with regards to what we are doing here. These other environmental laws like the Endangered Species Act, the Clean Water Act, the requirement to do EIS's—they weren't in force 100 years ago. How do we integrate new environmental policy like this when we have existing structures in place? I mean, that is the real challenge that we have here.

It sounds to me like it was being used or being approached in a proper way. I don't know that—I guess though that somebody has to be blamed for this so we are going to blame a beetle for it. I mean, I certainly don't want to take the blame, and, apparently, those in California are not eager to admit some responsibility. Dr. Mount, how do we integrate these new environmental laws with these existing type of structures?

Mr. MOUNT. You have used the most important term possible and that is integrate. What we have to do is start taking a more watershedwide view of these problems, rather than a local view of these problems. That is how we solve flooding. Now, it may be that we can promote habitat in other parts of the watershed which will actually spare us this tragedy each time in terms of maintenance of levees, especially those that are protecting urban areas. So we have to take an integrated look.

I am sure that, in fact, everyone on this panel will agree with me that, in fact, part of the problem is this local view especially when it comes to environmental laws. So I think integrated is the right word, and it is a watershedwide approach rather than breaking it up into simple, local districts.

And I want to also come to this local issue you have identified. That is a lot of the drive to the problem here. I want my levee to be rebuilt stronger and higher so that I can have a city right next to this levee. But, unfortunately, that causes harm to the entire system. And once we get out of that local issue and take a systemwide view, I think we are going to be able to solve more of these environmental problems.

Mr. VENTO. Let me point out that there was a statement made that under the emergency flood response, would that require consultation and mitigation before repairs are initiated? And the answer to that—the short answer is not unless there are substantial changes over and above what would be required.

So I think that some misunderstandings have arisen here with regard to this. From what I have heard at the hearing here, it sounded like some believe that that would be the case. So I hope the hearing will shed some light rather than just a lot of heat in terms of this issue. And thank you, Mr. Chairman. Thank you, Dr. Mount, for your responses.

Mr. POMBO. Mrs. Chenoweth.

Mrs. CHENOWETH. Thank you, Mr. Chairman. I want to thank you and Mr. Herger for this hearing and for bringing this issue to our attention. I have no questions to ask, but I have a very quick statement with regard to the same type of thing that is going on in my State.

In my district, Mr. Chairman, we have also suffered a lot of floods, not to the extent that you have. But in the beautiful town of St. Maries, Idaho, we had the Army Corps of Engineers and the U.S. Fish and Wildlife Service in a conflict. The conflict was resolved by them cutting cottonwoods along a levee along the St. Joe that housed the habitat for the bald eagle.

I was down there, and the townspeople were very upset because they were destroying the habitat. Now, they have decided to impose on the townspeople—the local units of government—the fact that the planting of new trees will take place two miles away from the levee, that the requirements include placing four or five artificial perches for the eagles on each area of levee where cottonwoods were removed.

Now, these perches for the eagles instead of the natural cottonwoods—these perches must be 60 to 100 feet high and have at least three "limbs" 60 to 100 feet high capable of holding a 20-pound eagle. Other requirements include limiting construction and maintenance to only March 1 through October 1 and then when fewer eagles are present on their artificial perches; then keeping vehicles and snowmobiles off the levee roads. I am not sure how we can maintain the levee at all without having some vehicles in there. And posting signs that tell people to keep their distance from the birds. I am sure people will not be attracted any longer to the beautiful St. Joe with these 60 to 100-feet high artificial perches.

Mr. VENTO. If the gentlewoman would yield——

Mrs. CHENOWETH. So thank you very much for bringing this to my attention.

Mr. VENTO. Would the gentlewoman yield?

Mrs. CHENOWETH. And I yield back to the Chairman.

Mr. VENTO. Would you yield to me? You have the time.

Mrs. CHENOWETH. Oh, certainly.

Mr. VENTO. Who made the decision in terms of the removal of the cottonwoods?

Mrs. CHENOWETH. The Fish and Wildlife Service and the Army Corps of Engineers.

Mr. VENTO. The Fish and Wildlife Service made the——

Mrs. CHENOWETH. They were involved——

Mr. VENTO. I mean, you know, the reason—I don't know what the nature of the problem was with the levee in Idaho. Was this for an irrigation purpose?

Mrs. CHENOWETH. It was flood control primarily.

Mr. VENTO. It was flood control.

Mrs. CHENOWETH. And irrigation but——

Mr. VENTO. But, you know, often, of course, cottonwoods absorb and transpire a great deal of water, and so there may be—I thought there may be other reasons here that the irrigation districts might have been concerned about the cottonwoods' presence.

Mrs. CHENOWETH. Our concern is making sure we can maintain the levee. We have a 200 percent snowpack and expect another flood. We have had one this last February, and we are really worried, of course, about the levee and want to be able to work with the agencies on making sure we can maintain the strength of the levees. But the rush to judgment and imposing 60 to 100-feet high artificial trees on the levee is not what will bring the beautiful, pristine environment back to the beautiful St. Joe River. Thank you.

Mr. POMBO. I thank the lady. Mr. Gibbons.

Mr. GIBBONS. Thank you, Mr. Chairman. Gentlemen, my name is Jim Gibbons. I represent that portion of Nevada that is just to the east of you and during the same 1997 timeframe, we had three rivers flood in the district I represent—the Walker River, the Carson River, and the Truckee River—with loss of life along with it. And we had structural failure. Some of those structures were flood protection rather than levees. They are structures, not levees.

What concerns me is from some of the testimony that I have heard from those people who are so concerned about the protection of the longhorn beetle that they will not vote for a bill or a measure that will allow me to go back to these people along these rivers in my State and tell them that we were able to take action that would have prevented not only the loss of life of your loved ones, but maybe the future loss of life because of their refusal. I am very concerned about that.

I would like to direct my questions to Mr. Lee, but before I do, I want to join my colleague from Louisiana, Mr. Tauzin, in his concern about the number of regulations and the amount of work that is required to maintain one of these levees. And I was looking through this historical background, and very quickly I want to read off in 1992 what is required before work on a levee could begin.

You have to comply with the National Historic Preservation Act, Archeological Historic Preservation Act, Archeological Resources Preservation for Protection Act, Preservation of Historic Properties, Abandoned Shipwreck Act reviews, Clean Air Act permit requirements, Clean Water Act Section 404, Coastal Zone Management Act review, Endangered Species Act consultation, Estuary Protection Act, Federal Water Project Recreation Act review, Fish and Wildlife Coordination Act, Land and Water Conservation Fund Act, Marine Protection Research and Sanctuaries Act.

This is nuts. National Environmental Policy Act, Rivers and Harbors Act, Wild and Scenic Rivers Act, Executive Order 11988 Floodplain Management, Executive Order 11990 Protection of Wetlands, CEQ Memorandum Analysis of Prime and Unique Farmlands in Implementing National Environmental Policy Act, and at the same time you have got California laws on Environmental Quality Act and Endangered Species Act.

How in the hell do you people get anything accomplished over there with all of these reviews that don't just bury somebody in the act that you need to take place, which is protect the safety of the citizens from flooding? And that is the point we are here to talk about. We are not here to talk about how to prevent flooding. We are here to talk about protection of lives, loss of property.

And I want to ask Mr. Lee if he can tell me is this flood a 100-year flood, and if the levees would have held, would you in California have seen or experienced the same level of damage if those levees that are under consideration had held in 1997?

Mr. LEE. Certainly not, Congressman. We have all kinds designed into the system besides dams, Federal and State and local dams—we have bypasses all up and down the Central Valley. We were prepared as a district down at the confluence of the Sacramento River and the Georgiana slough right at the head of the delta to take this flood. Unfortunately, the levee failed at the Yuba and up by the Sutter bypass.

But California has a very intricate and well-planned system of levees, bypasses, and dams that have been designed for over 50 years. We are not talking about brand new structures so some developer can come in and put a bunch of houses in the floodplain.

The whole intent of the witnesses here, and I think even the good professor, is we are talking about 50 and 100-year old structures that are designed to take these waters. Now, because you have a failure occasionally, that doesn't defeat the basic premise that these levees have to be maintained.

Mr. GIBBONS. Well, Mr. Lee——

Mr. LEE. In fact, except for—go ahead.

Mr. GIBBONS. Mr. Lee, let me ask this question because time is limited here, and that is the exact point I want to ask you. It is my understanding from your testimony that you are saying that as a result of the Endangered Species Act and its application to these levees that these levees failed during the 1997 flood.

And let me follow that with a quick question that you might also answer, that if Congress gives this exemption to the reclamation districts for these levee repairs and dredging, will or will not every other special interest group want the same exemption? Can you answer those two questions?

Mr. LEE. Well, yes, I can. I can only speak for those that are charged as public officials such as I am and such as the supervisor from Yuba County with protection of life and property. We are not seeking to change or enlarge or create something new like concrete over the elderberry beetle.

We are simply saying these are flood control structures much like the California freeways or the California dams or the bridges across San Francisco Bay. These have to be fixed and maintained. We are not asking for something new. That is not our problem. But we have a duty as local public officials to handle this problem. And as long as the Federal Government is getting in the way, we are having a heck of a time.

Mr. GIBBONS. Mr. Chairman, I asked a question, and I don't think the witness answered the first part of it, and I just would like your indulgence for one minute to ask that one question again. Mr. Lee, from your testimony, are you saying that as a result of the restrictions imposed by the Endangered Species Act that these levees failed in the 1997 flood?

Mr. LEE. I think the supervisor from Yuba County has adequately answered that question in the affirmative. Yes, that levee up in Yuba County should have been rebuilt years earlier. It wasn't because of the mitigation required by the environmental agencies. The work would have been done.

On the Thornton levee that I talked about earlier that took eight years to do five and a half miles, we abandoned six feet on the water side of the river because of environmental concerns. If we had not abandoned fixing that levee on the water side and only concentrated on the land side, we still would be studying the problem, Congressman, and that whole area would have been under water in '97.

Mr. GIBBONS. Thank you, Mr. Chairman.

Mr. POMBO. Thank you. Mr. Schaffer.

Mr. SCHAFFER. Thank you, Mr. Chairman. I would like a number of people, whoever has opinions there on the panel, to comment on the statement that I heard a little earlier from Dr. Mount when he described his belief that if you repair one levee on the system that it essentially forces or places some kind of pressure on another levee or another structure on the system that will cause it to fail, and that these are all related, that failure will occur somewhere, but repairing levees may just move that failure to some other section of a river or other water system or other sort.

Dr. Mount, I would like you to tell us more about that theory and provide an example. If the levee in question here were repaired and replaced, what failure will be caused as a result of that? And, secondly, I would like to hear from some of the others, whether they concur or whether they have a different opinion on that matter.

Mr. MOUNT. I think one of the most important things that came out of the Galloway report from the floods in the Mississippi River of 1993 is one person's disaster is another person's salvation, that, in fact, the 1,000 levee failures that occurred upstream of St. Louis spared St. Louis, literally.

And I will also argue, and I will argue strongly about this, that one thing we should keep in mind is that levee failures save the delta. Now, I am going to get some disagreement from my colleagues on this, but it is my professional opinion that indeed the delta, which handles two-thirds of the State's drinking water, would have collapsed had all the levees held in the system. Failure of those levees took pressure off and saved the delta.

So I think that is something that has to be kept in mind. Unfortunately, I don't have a recipe for how to deal with that issue when you are a local homeowner who is staring at the shadow of the levee next to you. But I think that is something we have to keep in mind when we sit and review the consequences of bills like this. Thank you.

Mr. NOMELLINI. I will take a crack at that question. I think while it is true that when you have water in the river at a certain stage, when a levee fails adjacent to your district, there is a drop in water elevation. So to that extent, you can say that, yes, there is some relief due to the fact that others have suffered a failure.

There are floodplains in the system that are designed to take water. There are also areas that are not protected to the same degree as others. So there are always in every flood opportunities or situations where water spreads out.

And while it is true—you know, I am down in the delta. I would agree, if the water didn't spread out in the upper river areas, the problems in the delta would be greater. But I don't think you go from that premise to the conclusion that you shouldn't repair and maintain existing levee systems. What it tells us is that we need a better plan overall which needs time to be developed.

I think it is incorrect for us to take off on the assumption that the solution to the problem is not to repair existing levee systems. We have cities, we have farms, we have large investments that we must protect while we do a better job on our planning.

Our previous planning was willing to tolerate a disastrous event maybe on the frequency of once every 50 years. Today, we think we don't want to ever have a flood. Well, we are going to have floods, and we are going to have levee failures. And the degree of protection is one of cost and investment. Do we want to protect against a 1–in–300 event?

I don't think we could ever protect to the point that we could assure there will not be some flooding. There are going to be levee failures. There are going to be dam failures. Bridges are going to fall down. Those things are going to happen on some frequency, but we should maintain what we have, plan for the future, take into consideration these floodplain things, put a larger degree of flood protection in there if we want. But by no means is there any justification for the premise that we should not maintain and repair existing systems.

Mr. HASTEY. I would also like to take a crack at that. I think that one of the things we have to look at is the system, and as being one member of this Committee, that my house has still not been rebuilt. The system works. I mean, 98 percent of the State of California was dry.

I mean, you can't say that the total system works. The dams did their jobs. The flows were kept down. The system actually worked. It failed miserably because we have levees that are 100 years old.

None of the levees in the North Valley failed because the water was coming over the top. This event wasn't a big enough event to cause the levees to fail by overtopping. It was caused by the structural integrity of a poorly built levee and possibly poorly maintained. And part of that maintenance problem is because we are confined with ESA rules.

One of the things I would like to point out in this bill that I know Dr. Mount agrees with is that we need setback levees. We need those levees further back so we can widen the channel. If this passes, you may actually get those, but I can tell you there aren't many districts and there aren't many people in the State who can afford to go through the EIS and the entire process to move those levees back. That is monumental.

I mean, it will take 20 years to get that done. I mean, if you want setback levees, and that is important, and you believe that is a process that needs to happen, then I believe this bill goes a long ways toward making those happen.

Mr. YENNI. I think that an optimal term we need to address here is we talked about flood prevention, and I think you need to contrast that with flood control. I think at least in my instance, we realize that we can't prevent a flood 100 percent. What you need to concentrate is on controlling it and to what extent are you going to control that flood.

Regarding building the levees higher and putting pressure on other systems further down, I know in my area if my levees are adequate, the only pressure that also results will be in San Francisco Bay. And I don't think it is going to flood San Francisco Bay. It will put the whole Marina district under water. Likewise, further up the system from me, the drainage is small enough such that we can push the water down with a small elevation in height.

Another thing that we have, I think it was mentioned a little bit earlier about dredging of channels. The Corps of Engineers has determined that sloughs and creeks surrounding our lands are navigable waterways.

I know that when we went out there to look at some of the restoration-site which is taking place on a portion of the place I farm, Fish and Wildlife Service, Fish and Game were out there. And we had trouble finding that navigable waterway.

We are standing in the middle of it along about July or August. We said, "Yes, I think it is—it must be around here. There is a depression. That has to be the channel." So we need to have a little consideration given to these navigable waterways and how you can't find them.

Mr. POMBO. Thank you. All right. I want to thank this panel for their testimony and at this time call up the next panel. Thank you very much, and you are excused at this time. The next panel is made up of Mr. David Zappe—excuse me—Mr. Frank Peairs is taking his place; Mr. Walter Cook; Mr. Robert Frost; and Mr. Robert Clark.

Mr. TAUZIN. Mr. Chairman, I ask unanimous consent to be recognized out of turn at this point. Mr. Chairman, I was not here for an opening statement. I just want to make an observation.

Mr. POMBO. Without objection, the gentleman is recognized.

Mr. TAUZIN. As we are gathering the second panel, it just occurred to me that, you know, we have a similar concern in our State where we are building and trying to maintain levees to protect lives and property. And all too often, we have very, very limited resources available for us; that often the levee doesn't get built, not because of regulations, and the repairs are not made, not necessarily because of regulations, but because we don't have enough money. And when we finally gather the money together, we are told that part of the money has to be used now to go do an environmental mitigation project.

And while environmental mitigation may be very important and environmental projects may be very important, what I guess we are discussing today is whether these precious dollars, and the precious time we have to fix levees and maintain them, and the precious effort that is available to us in terms of public resources to get that work done should be diverted for other governmental and high-minded purposes to protect beetles. In short, are beetles more important in terms of spending these precious dollars than protecting lives?

And Mr. Herger showed me a report by the Corps of Engineers that predicted that lives were going to be lost in his district if the levee was not fixed on time. It was not fixed on time, and we are hearing that part of the reason it was not fixed on time was because the government decided that spending money to protect beetles was a higher priority.

And I think that is what really this panel has taught me—is that in my own State we think we have problems already with these concepts, and we haven't yet been faced with these kind of regulations. If we ever have these problems, I don't know how we would survive in south Louisiana. And I understand a little better why some of your constituents were not able to survive, Wally, and why we need to change some laws in this country.

Mr. POMBO. At this time, I would like to recognize Mr. Frank Peairs who is the Assistant Chief Engineer at the Riverside County Flood Control and Water Conservation District. Mr. Peairs.

STATEMENT OF FRANK PEAIRS, ASSISTANT CHIEF ENGINEER, RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, RIVERSIDE, CALIFORNIA

Mr. PEAIRS. Thank you, Mr. Chairman, members of the Committee. Over the past 50 years, the district has developed an extensive system of flood control facilities, including 35 dams and detention basins, 48 miles of levees, 188 miles of open channel, and 182 miles of underground storm drains. Timely maintenance of the district's system is critical to ensure protection of the lives and property of our residents.

The district is mandated to maintain projects constructed with Federal partners to standards dictated by the Federal agencies. And the Federal Emergency Management Agency, or FEMA, mandates local government to maintain its flood control facilities as a condition of participation in the National Flood Insurance Program. Failure to do so can result in expulsion from the program and other sanctions.

For decades, the district routinely maintained its system without outside interference. But over the past several years, we have been hamstrung in this effort through the regulatory activities of several Federal agencies, including the Corps of Engineers, the Environmental Protection Agency, and the U.S. Fish and Wildlife Service.

These agencies have veto power over local flood control maintenance activities by virtue of regulations promulgated under authority of the Clean Water and Endangered Species Acts. Although these laws have been on the books for many years, their impact has become more burdensome as Federal agencies have issued new and more stringent regulations, often without authority of new law and sometimes as a means to negotiate settlement of environmental lawsuits of questionable merit. An example is the lawsuit negotiation which resulted in the Corps of Engineers adopting the so-called Tulloch Rule which was recently overturned by the Courts.

Today, three separate Federal permits are required under the Clean Water Act to operate and maintain the district's flood control systems, including a Section 404 permit from the Corps of Engineers. In addition, under Section 7 of the ESA, the Corps is required to consult with the Fish and Wildlife Service where a permitted activity may jeopardize and endanger a threatened species. And EPA retains veto power over any activities that they do not agree with.

This web of multiple Federal permits prevents timely maintenance of critical flood control facilities and poses an ongoing threat to the public health and safety. Many examples can be cited.

In one case, the district was prevented from making critical repairs to the Santa Ana River levees because two endangered woolly-star plants were discovered in the general area of the work. The district is mandated to maintain these levees by the Corps of Engineers which constructed them. We could not do so for more than two years, even though a failure would have been catastrophic.

In another case, in January 1993, overflow from Murrieta Creek caused serious flooding in the Old Town area of the city of Temecula. Flows raged through businesses, restaurants, and residences causing over $10 million worth of property damage. I was there that night. The power was out, and as I looked into the darkness of Old Town, I was certain that many lives had been lost. Through some miracle, none were. But there were many close calls.

The real tragedy is that the flood was absolutely preventable. Prior to the flood, Federal officials had refused to allow mechanical clearing of vegetation and the removal of accumulated sediment on the creek, partially due to alleged concerns about the endangered least Bell's vireo, and only after the damage occurred did they allow the critically needed maintenance to take place. Ironically, FEMA later reimbursed the district and the city of Temecula for the cost of the post-flood maintenance.

Survival of an endangered or threatened species was not at stake in either of the cited cases, but inflexibility built into the ESA, coupled with indifference to public health and safety issues on the part of the resource agency and regulatory staffs, prevented the district from taking appropriate corrective measures in a timely manner unnecessarily jeopardizing lives and property.

I have focused on maintenance issues today, but the district has also experienced major difficulties with the ESA in permitting new flood control projects. Additional information on these problems has been provided in the district's written testimony, along with a specific list of reforms to the Endangered Species Act recommended by the district.

Time prevents me from covering the entire list, but the most critical of the proposed reforms is a categorical exemption from provisions of the ESA for routine maintenance and emergency repair of all existing flood control facilities, and I would say not just levees.

Accordingly, on April 8, 1997, the district's governing board approved Resolution Number F97–5 supporting H.R. 478, the Flood Prevention and Family Protection Act of 1997. A copy will be provided to the Committee upon certification by the clerk of the board.

The district fully understands that flood control programs and projects are currently undergoing dramatic change. But numerous citizens still rely on existing flood control systems to protect their lives and property. And reform is urgently needed to ease the regulatory burden on local governments and to allow critically needed maintenance to take place. Thank you for your consideration of these remarks and the additional information and recommendations contained in our written testimony. Thank you.

[Statement of Mr. Zappe may be found at end of hearing.]

Mr. POMBO. Thank you. Mr. Walter Cook.

STATEMENT OF WALTER COOK, CHICO, CALIFORNIA

Mr. COOK. Well, thank you, Mr. Chairman. My name is Walter Cook. I am a retired attorney, and I own a walnut orchard which is located adjacent to the Feather River levee which broke on January 2, 1997. Much of my orchard was washed away. The remainder is covered by about six to eight feet of sand. My house, shop, and mobile home were disintegrated. Most of my equipment is hidden under the sand in unknown, scattered locations.

H.R. 478 is being offered as a remedy for future flooding. However, before adopting a remedy, the cause of the problem must be first explored. So far, there has been much loose talk that the beetle did it. Based on my personal knowledge of the Arboga levee, I would like to share some information and thoughts which relate to the many probable causes of this breach.

The levee is made entirely of sand. During previous high river flow, substantial levee erosion has been common in the vicinity of this break. Such erosion is likely to have occurred during the '97 flood and could easily have caused the levee break. Moreover, the toe of this levee had been a long-term problem.

Rather than a delaying of repairs to the levees, in 1989, repairs were made to the levee at my orchard. A 1,000-foot long, 10-foot deep trench—a toe drain—was dug along the landward toe of the levee just north of Country Club Road. It may be more than coincidence that the break occurred at the precise location of this toe drain.

While we cannot know whether the toe drain weakened the levee, we do know that the toe drain was ineffective in preventing the break of a levee that had previously existed for some 50 or more years.

I understand that this stretch of levee was constructed over deep sand and gravel of the old riverbed. Incorrect original placement of the levee was another probable cause of the breach.

Despite the many factors which could easily have caused the breach, many have seized on the mitigation pond as the undisputed cause of the break. This scenario, disregarding all others, is being used to justify diminishing the effectiveness of the Endangered Species Act.

The pond is located about three-quarters of a mile from the center of the levee break and about 200 yards riverward of the levee. The claim that this pond caused the break requires an active imagination, in my opinion.

It is also claimed that the Endangered Species Act prevented proper levee inspections and repairs, and that it held up levee restructuring. In its '96 study, the Army Corps stated that the levees in the study area are maintained regularly. I could relate to that. Since 1976 annually, the levee slopes have been burned. There has been a prevention of the colonization of endangered species on the sides of this levee.

In addition to burning the levee, there has been a dragging of a bar across the sides of the levees with a bulldozer. Maintenance—I have to commend Reclamation District 784 for having done an excellent job in maintaining the levee. There has apparently been no problem with the Endangered Species Act insofar as levee maintenance of the levee that just broke.

In summary, we need to change our outlook on the natural world. The destruction of my orchard is not the fault of nature. The flood was caused by the refusal of we humans to accept the natural world the way it is. And our pitiful attempts to force the river to go where it would not go, blaming other species, which we are about to destroy forever, is not the answer.

Despite our greed and arrogance, what right do we have to satisfy our own desires by driving other creatures to extinction? Humans can build faulty levees and dams that don't work, but we cannot create even one of nature's most insignificant bugs or rodents. Rather than doing everything we can to destroy the earth, we must learn to live with and protect the paradise we were given.

The choice is not whether humans or bugs are superior. Humans must live in harmony with other creatures.

Without providing any substantial benefits to flood control, H.R. 478 will result in more Los Angeles rivers and other poorly-thought-out projects. Elimination of dams from review is particularly unconscionable. H.R. 478 is a bad bill and should be rejected out of hand.

Mr. Chairman, I have a small package here of additional information which relates to the toe drain of 1989. I would like to submit that as part of the record if that is possible at this time.

Mr. POMBO. Without objection, it will be included in the record. Thank you.

[Statement of Mr. Cook and added information may be found at end of hearing.]

Mr. POMBO. Mr. Robert Frost.

STATEMENT OF ROBERT FROST, CALIFORNIA CATTLEMEN'S ASSOCIATION, SANTA PAULA, CALIFORNIA

Mr. FROST. Thank you, members of the Committee. My name is Rob Frost. I operate a cattle ranch and land clearing business in Santa Paula, California, which is in southern California. I am currently serving as Second Vice President of the California Cattlemen's Association. I am here today representing the organization, as well as landowners along the Santa Clara River who have suffered severe flood damage.

The CCA is a nonprofit organization which has over 3,000 members and has represented the State's beef cattle producers in legislative and regulatory affairs since 1917. Our members own, control, and manage approximately 38 million acres of California's 100 million acres. On the land we control, we house a majority of the State's wildlife, plant species, and correspondingly the greatest percentage and number of the State's endangered and threatened species under the Endangered Species Act.

My testimony today serves to call attention to two issues: the dilemma which I and other landowners along the Santa Clara River have experienced due to the lack of flood control measures to protect public and private property. The other is the dilemma which ranchers and other landowners throughout California face due to agency permitting requirements that restrict our ability to repair or restore property other than just levees and other flood control projects damaged or destroyed by flooding or other natural disasters.

Basically, in both cases, the dilemma has been the direct result of the Federal Government's enforcement of ESA which has taken a severe toll on the ability of landowners to protect their property and their livelihoods. It seems like every year now we have a flood.

Just normal rainfall causes floods in Ventura County, predominantly '92, '93, and '94, and '95—weren't bad years but we had floods, and the main reason is that Ventura County Flood Control District will not fund money to do normal maintenance. And then, of course, we have the Corps of Engineers and the Fish and Wildlife Service stepping in with these horrendous mitigation measures.

Many producers lost hundreds of acres of crops and land—a permanent loss of 20 to 100 feet of soil depth in each case and the irrigation system that went with them due to torrential rains that caused the river to shift course on a four-mile stretch and rip up nearly $2 million worth of crops and land. Refer to the Sacramento Bee article that is in my testimony. In addition, at least two oil wells and oil lines were at immediate risk, a natural gas line was ruptured and destroyed twice, and utility lines were downed, creating tremendous risk.

The landowners have requested help. Our problem down there is not levee maintenance. It is just maintaining the pilot channel in our river. The river is not controlled by levees, but the levees do protect the sidewalls of the river.

The landowners who requested help and had limited financial resources were denied permission to expedite repairs on their property to prevent further flooding and restore what was damaged. Landowners with adequate financial resources were allowed to take immediate action for restoration efforts but only because they could financially commit to unreasonable mitigation procedures.

For many years, not less than 70, the local flood control agencies contracted out pilot channel excavations in the river to small contractors and owner/operators of earthmoving equipment. Simply put, these contractors and equipment companies maintained a pilot channel that would handle just about any kind of normal rainfall. Except for the major flood we had in 1969, it would take care of that.

We had rock and sand companies willing to come in and excavate the pilot channels and serve an economic benefit to Ventura County which was out of aggregate at an economical yield. All that stuff was fine and dandy, and the agencies were ready to go until they came up with the mitigation measures.

Now, we are talking the farmland valued at $15,000 to $35,000 an acre in Ventura County. The mitigation requirements by the agencies—there was just no cost benefit ratio to the farmers. Nothing was done. The center of our river is higher than the banks right now.

I am about out of time, but, anyway, we fully support H.R. 478. Our biggest problem is the agencies won't react. They have—I don't mean for anybody to take it personally—they just don't know what is going on. They have got no sense. And we have people down there—small family farms—that are absolutely financially desperate because of the flooding we have had. I mean, they have lost orange groves mainly because the agencies will not maintain a pilot channel down through the river.

In closing, natural disasters can take a significant financial toll on investment we have in our businesses and our ranches. Property owners who have gone through the trauma associated with having their property destroyed and lives disrupted should not be further burdened with expensive permitting and delayed processes. Thank you.

[Statement of Mr. Frost may be found at end of hearing.]

Mr. POMBO. Thank you. Mr. Robert Clark.

STATEMENT OF ROBERT CLARK, CENTRAL VALLEY FLOOD CONTROL ASSOCIATION, SACRAMENTO, CALIFORNIA

Mr. CLARK. Mr. Chairman and members of the Committee, I am the manager of the California Central Valley Flood Control Association, and I want to thank you for the opportunity to bring some of the concerns of our members to this Committee today.

The Association was formed in 1926 to promote and secure the integrity of the Sacramento River Flood Control Project. Today, we represent the interests of those responsible for the maintenance of the levee and drainage system with membership from throughout the Sacramento Valley and Delta.

Our members include reclamation, levee, drainage districts, counties, one city, and private landowners. The importance of the Endangered Species Act is recognized by our members who, of course, provide considerable habitat for protected species.

We want to work with the Congress and regulatory agencies in an effort to provide for practical and successful implementation of the Act, while recognizing the greater need to assure protection of life and property from the ravages of flood. We believe the Act needs to be changed to recognize the conflicts created by its strict application.

Flood control facilities are safety devices. Here in California, our economy, our property, and our lives depend on their successful construction, operation, and maintenance. This protection extends to the wildlife and habitat within the leveed system. Yes, levees protect wildlife too.

The protection provided wildlife and habitat by levees is never considered when mitigation requirements are developed. A secure flood control system should not be compromised by the misguided desire to enhance fish and wildlife.

Environmental law, regulation, and regulators have served to delay, discourage, and sometimes prevent essential flood control work. And in almost all cases, they reduce significantly the funds available for flood protection. One of the most difficult aspects of compliance with environmental regulation requirements is the constantly narrowing time period when work is permitted to be done.

It seems that by the time periods are set aside for nesting, hibernating, and migrating species, there is inadequate opportunity to accomplish the needed maintenance and repair work in a reasonable and efficient manner. This drastically increases cost and limits the availability of contractors capable of accomplishing their work. Safety first, not safety second, should be our motto.

The California flood of 1986 resulted in identifying many areas where levee standards were deficient. Many of these sites remain unimproved 11 years later. At one of these sites you heard about a major failure that occurred. We have heard these delays categorized as administrative. Environmental law and regulation is the primary cause of these administrative delays.

Most of the environmental aspect of a project is based on biological opinion. The opinions expressed by the several regulatory agencies are often in conflict, and resolution of these conflicts delays progress. There is no motivation for any of the regulatory agencies to proceed in a timely manner, and personnel changes, as well as the ongoing process of new ESA listings and revised biological opinions, further add to the delay and rising cost.

The actual cost of project implementation is often a fraction of the overall project cost. Funding for construction is not requested or scheduled until all environmental documentation and mitigation is determined.

The ESA is not used directly to stop projects. It is used as a fallback authority to acquire potential habitat. Flood control managers are good stewards of the environment. They are willing and ready to assist in the preservation of habitat and endangered species. Their first priority, however, is providing protection for the lives, property, and economy of the area they serve. People who live behind the levees are highly motivated to assure a secure flood control system.

The obstructionist and what appears to be punitive nature of the application of the ESA on vital flood control projects must be overcome. Lacking any achievement of practical reform to the Act in recent years and the current method of application to vital safety projects has led our Association to the support of H.R. 478. We strongly support the view that operation and maintenance of existing flood control structures should be exempt from requirements under the ESA. Thank you for your consideration of our comments.

[Statement of Mr. Clark may be found at end of hearing.]

Mr. POMBO. Thank you. Mr. Clark, in your opinion, is public safety being put at any additional risk by the delays and cost increases associated with the ESA compliance?

Mr. CLARK. Chairman Pombo, I certainly believe there is a risk. Whenever you have a levee that is identified as deficient and defective and you delay for years resolving that problem, it is bound to be a risk when you know you have a problem.

And even if you don't know it, you should be working on it. But the delay that is associated with it, it is not unusual to go to a meeting on these projects and spend eight hours discussing them, and the only thing resolved is setting the date for the next meeting.

Mr. POMBO. Do these additional costs of mitigation and compliance have any impact on the ability of the individual districts to make the repairs that are necessary?

Mr. CLARK. They certainly do if the cases that are not emergencies because the project—there is a local cost sharing for construction, and, of course, many of the project levee—many of the levees—not project levees—that are owned by reclamation districts, particularly in the delta, are not Federal levees so they receive no Federal funding.

They get some State assistance in some areas but not all areas. So they do definitely add to the cost and the ongoing mitigation. And I just think the permitting costs are in many cases exorbitant, and they could be much—be streamlined by revisions to the Act.

Mr. POMBO. You represent a number of people who are involved with the maintenance of the levee system, with the reconstruction of the levee system throughout the entire area. In your opinion and through your experience, when you have these kind of delays that you have described in your testimony and in answering the questions to the repair of the system, over a period of a number of years—say 15 years—where work that should have been done is delayed over a period of time, which, you know, even if it is ultimately done, it delays other work that should be done, and when you have an event like what we went through in the first part of this year, does that impact the ability of the system to handle that amount of flow, that amount of water that goes through it?

Mr. CLARK. Well, the levee system in the Sacramento River Flood Control Project is, of course, a very integrated system. It is integrated with the reservoir operations, the levee system, the weirs and bypass system, and so forth. And the delays in environmental work or ones I have referred to earlier, they are expensive.

They are often faced with impractical mitigation requirements, and it takes time to resolve those differences of opinion. Opinions are written by what I would term apprentice biologists in distant offices, and they have to be revised once they get out to the field and they are reviewed.

I think one of the main aspects of environmental regulation is the uncertainty it provides to the operations people in the field. They never know what issue is going to impact them in the work they are doing.

Mr. POMBO. Thank you. At this time, I will recognize Mr. Herger—if he has any questions.

Mr. HERGER. Thank you, Mr. Chairman. I would just like to reemphasize what the purpose of this legislation is and also what the purpose is not. There were some comments that were made earlier in our hearing that perhaps the purpose of this legislation was to build more reservoirs. I personally feel we need to build more reservoirs, but that is not the purpose of this legislation.

What the purpose of this legislation is, is to ensure that we do not have a repeat of what we had happen on the Yuba River, and which in 1986—again, to repeat this—Reclamation District 784 recognized that they needed to repair a specific levee problem.

Four years later in a study because of environmental laws, U.S. Army Corps of Engineers reported—again, let me—I don't know if we can quote this too many times—this is their quote—now, this is in the precise location where the levee broke—their quote was, "Loss of human life is expected."

And, Mr. Cook, I hope you are listening to this because certainly our purpose of this is not to destroy or allow any of our endangered species to become extinct. That is not the purpose.

But the purpose is to put human life first, and I believe we have every right to expect that. I believe the families of those three individuals who lost their lives have every right to believe that the U.S. Congress is putting the lives of our citizens even before that of endangered species.

And to finish this quote, it says, "Loss of human life is expected under existing conditions without remedial repairs for a major flood event." Now, that was a statement made by the Corps of Engineers four years after the levee was attempted to be repaired, and seven years before the levee break occurred, and about seven-and-a-half years before it was finally down to be repaired. Now, that is wrong. That is about as incredibly unacceptable as any disaster that I have ever seen.

That is the purpose of this legislation, to be able—and during this period of time, also the comment was made that it is not anything new to anyone in this Congress, or certainly in our State, or in any of our 50 States that we have a shortage of funds here in Washington.

We are attempting to balance the budget, and I serve on the Budget Committee. We are looking at every dollar we spend. And you know what we spend on a break or—that the original estimate to repair in 1990 of this break was $3 million for this problem—we had in this specific levee, $3 million. Now, after it broke, it is going to cost $9.3 million. Plus that, we spent $10 million on mitigation.

And not only is the levee still not repaired, but it was written in a letter—a memo I have from the Yuba County Water Agency, 35,000 people were displaced by this one repair that was recognized in 1986, 500 homes were destroyed, 9,000 acres of prime farmland was displaced, and four of the largest employers in all of Yuba County were inundated.

But as bad as all that is, the worst of all is that three human lives were lost that need not to have been lost right directly in front of where that levee broke. Now, that is wrong. And we have a responsibility to not only protect endangered species, which I also support, but to protect human life.

And this legislation would allow us to go in and to build and repair our levees, to put that as our highest priority, to do it in an expeditious way in which we do not have to go in and mitigate first so as to be stalled. That is the purpose of the legislation, Mr. Chairman, and I appreciate all of our witnesses that are here testifying on this today.

Mr. POMBO. Thank you. Mr. Schaffer? Mrs. Cubin? I would like to thank the panel for your testimony. There may be further questions that would be submitted to you in writing. If you get those questions, I would appreciate it if you could answer them as quickly and succinctly as possible so that they can become part of the official record of the Committee hearing. And at this time, I would like to dismiss the panel and thank you very much, all of you, for your testimony.

OK. At this time, we are going to call up the next panel that is going to testify here today. It is going to take just a few minutes of delay so that the stuff can be moved out of the way so that they can sit at the hearing table. So we are going to delay for just a few minutes here while they do that.

STATEMENT OF GEORGE GRUGETT, LOWER MISSISSIPPI VALLEY FLOOD CONTROL ASSOCIATION, MEMPHIS, TENNESSEE

Mr. GRUGETT. Mr. Chairman, thank you very much, and I do apologize. I made the only reservation I could to get back home tomorrow. But my name is George Grugett, and it is my pleasure and privilege to serve as the Executive Vice President of the Lower Mississippi Valley Flood Control Association, an agency composed mainly of public officials that for the most part are elected to serve the people on levee boards, drainage districts, ports and harbor, State agencies, cities and towns, and other State agencies in the States of Illinois, Kentucky, Tennessee, Missouri, Arkansas, Mississippi, and Louisiana, extending from Hannibal, Missouri, to the Gulf of Mexico.

Mr. Chairman, I have been in this business for about 50 years, and I would like to just deviate a little bit from my statement and make a few comments. Dr. Mount, in his statement, said that levees will fail. We in the Lower Mississippi Valley have not had a levee failure since 1927. That is about 70 years. Congressman Tauzin's comments I really enjoyed.

There was a lot of mention made of floodplains. Our floodplain in the lower valley is 100 miles wide. When you have got that kind of floodplain, you don't talk about moving people out. But this Association has appeared before the Congress and served the people in the lower valley for well over 60 years.

I sincerely appreciate this opportunity to testify today on the implementation of the Endangered Species Act. Let me begin by stating emphatically that I strongly believe in protecting our environment, and everyone I know and associate with shares that belief and desire. I also strongly believe in private property rights, the rights that form the economic framework that this country was founded on.

It is my strong opinion that the multibillion dollar environmental movement and some bureaucratic government agencies have harmed our economy and violated the liberties and freedom of the American public. I am also sure that only the elected Congress of the United States can change that violation of private property rights and prevent Americans from being crushed by fanatical environmental extremists.

My discussion of the implementation of the Endangered Species Act must begin with the long-held belief that there is nothing basically wrong with the Act itself, but the interpretation and enforcement of this Act by Federal agencies have created a very costly and unacceptable time-consuming situation that is not visible to or known by the public.

This interpretation and enforcement has caused the Federal Government to expend lots of resources, both money and people. Fortunately, because of the generosity of the taxpayers, the Federal Government has those resources.

Unfortunately, the local people do not have the necessary resources and assets. Therefore, work, especially flood control work, simply does not get done. The time and money required just to file an application for a permit is not available in most cases to the ordinary citizen.

The Federal Government has to expend the time and money because of the rules, regulations, and policies that have been promulgated by the Endangered Species Act. The majority of this effort is to satisfy the U.S. Fish and Wildlife Service.

An example of the resources that must be used to both satisfy the misinterpretation of the Endangered Species Act and provide adequate flood control protection took place on the St. Francis River in east-central Arkansas.

This reach of the St. Francis River was an integral part of the complex St. Francis Basin Project that provides flood protection for almost 2 million acres in northeastern Arkansas and southeastern

Missouri. The project had been jointly built by the local people and the U.S. Army Corps of Engineers.

In order for the flood control project to function properly, maintenance work in the form of dredging to remove accumulated siltation was required on the St. Francis River south of Highway 64 in Arkansas. The Corps awarded a contract for the maintenance work in 1977 at an estimated cost of approximately $1 million.

Shortly after work began, a dead mussel, identified as a fat pocketbook pearly mussel, was discovered near the worksite. Since the fat pocketbook pearly was one of 50 or so mussels listed as endangered, work was stopped. The contractor filed a claim against the government, and he was paid approximately $1 million, this in spite of the fact that little or no work had been performed.

The maintenance work was halted for a period of 11 years, and lands and homes were flooded that would not have been if the required work had been done. In addition to this damage, the Corps of Engineers spent another $1 million locating and relocating the fat pocketbook pearly mussel. $2 million was expended, 11 years was wasted, and no flood control protection was provided.

The epilogue to this story is that work was resumed with individuals being paid to literally crawl on their hands and knees in front of the dredge removing and relocating mussels. The irony is that not only was the fat pocketbook pearly mussel subsequently found in large numbers over a vast area, but it was evident that they grew best in disturbed channels, in other words, channels that had been previously dredged.

There are many stories that are as ridiculous and costly as the experience with the fat pocketbook pearly mussel. We cannot afford that type of thing any longer because of drastic cuts in the Corps of Engineers civil works project.

If I may, sir, I would like to point out one thing that is of great concern to us now, and that is the Fish and Wildlife's designation of critical habitat for endangered species. Just one example is a proposal by the Service to designate a total of 3 million acres in Louisiana and Mississippi as critical habitat for the conservation of the Louisiana black bear.

No one wants to see harm come to the Louisiana black bear. But if almost 5,000 square miles are designated as critical habitat, and the Corps of Engineers' 404 permitting program requires that the issuance of a permit does not result in the adverse modification of critical habitat, you can easily see that we and the Corps of Engineers are going to be hard-pressed to bring some 300 miles of deficit levees in Louisiana and Mississippi to the required grade and section.

When those levees fail, and they will if not corrected, not only will the Louisiana black bear be in immediate and critical danger, but so will about 4 million people and their homes and property. I must point out that this designation of critical habitat also has a strong potential for imposing undue restrictions on the activities of private landowners.

Briefly commenting on H.R. 478, that proposes certain exemptions from the Endangered Species Act for flood control projects. We do not believe that flood control projects in their entirety should be exempted from the requirements of the Endangered Species Act as the Act itself has made positive contributions to our quality of life in the United States.

What we are really asking for is tolerance for people and their livelihood on the implementing rules of the Act. The Endangered Species Act, because of the way it is formulated, requires the U.S. Fish and Wildlife Service give total weight to the conservation of the species regardless of the consequences to people, their property, and their livelihoods.

The Act should be modified to reflect a balance, the weighing of people's needs against that of the species. We hope that the Congress will modify the Endangered Species Act to bring about that balance, and thank you for your time.

[Statement of Mr. Grugett may be found at end of hearing.]

Mr. POMBO. Thank you, sir. If none of the members have any questions of the witness, he can be excused at this time, and thank you very much for your testimony.

Mr. GRUGETT. Thank you, Mr. Chairman.

Mr. POMBO. At this time, I will recognize Mr. John Garamendi, Deputy Secretary, Department of Interior.

STATEMENT OF JOHN R. GARAMENDI, DEPUTY SECRETARY, U.S. DEPARTMENT OF THE INTERIOR, WASHINGTON, DC

Mr. GARAMENDI. Mr. Chairman, I appreciate the opportunity to be here today to discuss the recent and tragic flooding which has taken place in California, the Northwest, the Midwest, and other parts of this country. Our hearts go out to those who have suffered losses from this series of devastating floods.

First, I would like to commend the U.S. Army Corps of Engineers, the Bureau of Reclamation, the Geological Survey, Fish and Wildlife Service, as well as State and local floodfighting agencies. While the extent of this year's flooding was catastrophic, these agencies have performed effectively and thereby avoided serious additional damages and threats to life and property that would have occurred had they not been working so effectively.

Mr. Chairman, my testimony is beyond the length of time available. I am going to in my comments shorten it. The written statement has been presented, and I would like you to put that in the record. In January of 1997, the Fish and Wildlife Service implemented the disaster provisions of the Endangered Species Act, Section 7, consultation regulations in 48 California counties that were declared disaster areas by the President. Rapid and effective response to damaged flood management systems was undertaken, and that did result in the minimization of risk to life and property.

In addition, on February 19, 1997, the Director of the Fish and Wildlife Service issued a policy statement further clarifying and articulating our flood emergency policy under the Endangered Species Act. A copy of that policy has been provided to the Committee, and it is attached to my testimony.

The policy is that, essentially, during this flood season, the repair and replacement of flood damaged flood control facilities may proceed unimpeded and without review as long as landowners and government agencies plan to repair or replace the damaged facilities to substantially the same condition as existed before the flood.

I think we need to spend a great deal of our time looking at the long-term restoration of the California and American flood systems. The Department of Interior's long-term flood management strategy is to develop cost effective and economically sustainable approaches to reducing future flood damages so that these systems are consistent with the need to protect and restore important environmental natural resource values that are inherent in the floodplain and adjacent lands.

Our Department will continue to work cooperatively with Federal and State agencies, local communities, water districts, and concerned citizens to examine the long-term flood damage reduction measures. Our hope is to achieve a flood control system that is based on reducing flood damages through these cost-effective and, where appropriate, nonstructural alternatives while minimizing the development in the floodplains.

If I might for a moment turn to the Endangered Species Act regulations and the flood protection measures. This Committee has heard much today, and much has been said in the past about the Endangered Species Act and the flood. Let me make it perfectly clear that in our view, the Endangered Species Act has been wrongly blamed for flood damages in California, particularly relating to the operation and maintenance of the levee systems along the Sacramento and the San Joaquin Rivers.

The storm that hit northern California beginning just after Christmas paralleled or exceeded the historic California storms of the 20th century. For example, flooding on the San Joaquin River ranked four times greater than 1986. Oroville Reservoir on the Feather River experienced a record inflow of over 302,000 cubic feet per second. That is over a 120-year event. And the outflows were 20 percent greater than the previous record in 1986.

Mokelumne flows below the reservoirs peaked at close to 8,000 cfs, which is the highest flow recorded in over 80 years. On the Cosumnes River, it experienced flows over 90,000 cubic feet per second, which was twice as high as any recorded flows since 1906. Certainly, the levee systems were simply overwhelmed by the magnitude of the January floods.

In addition, we are aware of no cases where it can be shown that the implementation of the Endangered Species Act caused any flooding and any flood control structures to fail. Nor has the presence of any listed species prevented the proper operation and maintenance of flood control facilities prior to the recent floods.

Now, I would like to take an opportunity to express my Department's strong opposition to the Flood Prevention and Family Protection Act of 1997, H.R. 478. While the Department agrees with the need to reduce flood damages and to protect residents living in flood-prone areas, we do not believe this legislation will achieve these goals.

In fact, legislation has the potential to worsen the problems it seeks to address. Legislation proposes broad exemptions from the Endangered Species Act which would encompass a majority of Federal and nonFederal water resources projects. There are thousands of Federal and nonFederal projects that have flood control as one of their functions.

You might include the Hoover Dam, or the Grand Coulee, or the Shasta Dam in this list, and certainly most every hydropower facility would be included. We believe this bill, as written, would exempt virtually all Federal and nonFederal water resource projects and flood projects from compliance with the Endangered Species Act.

Amending the ESA in this fashion will not enhance anyone's ability to operate or maintain flood control facilities. If assumptions that floods can be prevented solely by structural means, by eliminating the Endangered Species Act, that would allow businesses and residences to live and to work in areas that are subject to frequent flooding. As a result, some communities will become immune to small and medium-sized floods, only to be devastated by larger and more intense floods that will inevitably occur.

The bill will contribute to a false sense of security and may encourage further development in flood-prone areas, thereby increasing future flood damages. It doesn't solve the flood problem. It doesn't solve flood damages or lost lives and property. We believe it will make things worse.

We also recognize that there are several endangered species living along the levee system in the Sacramento and San Joaquin Rivers, and we have, therefore, developed cooperative agreements with Federal and State agencies, water management districts, and others to reconcile the needs of the listed species. We have many examples of how these coordinated and cooperative programmatic consultations have sped projects and caused them to be undertaken in a more timely manner.

I will not go into all of those details. But, in conclusion, all of us must recognize that this is not the last natural disaster that will affect lives and properties. Therefore, all of us must be committed to continually improving our capability to respond. We can do this by designing our systems so as to recognize that Old Man River will have his way eventually. We must design our systems to accommodate the river. That is the conclusion of my testimony. The written version is available to you, and I would hope you would put that in the record. I would be happy to respond to questions.

[Statement of Mr. Garamendi may be found at end of hearing.]

Mr. POMBO. Thank you. Your full written statement will be included in the record. Mr. Michael Davis.

STATEMENT OF MICHAEL L. DAVIS, DEPUTY ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS) POLICY AND LEGISLATION, ACCOMPANIED BY SUSAN L. RAMOS, CHIEF OF THE ENVIRONMENTAL BRANCH, CORPS OF ENGINEERS, SACRAMENTO DISTRICT, MICHAEL F. NOLAN, CHIEF, CIVIL BRANCH, PROGRAMS AND PROJECT MANAGEMENT, SACRAMENTO DISTRICT, AND THOMAS S. COE, REGULATORY BRANCH, DEPARTMENT OF THE ARMY, WASHINGTON, D.C.

Mr. DAVIS. Mr. Pombo and members of the Committee, thank you for the opportunity to be here this afternoon to testify on the impacts of the Endangered Species Act on the ability of Federal, State, and local government agencies to provide flood protection.

I am Michael Davis, the Deputy Assistant Secretary of the Army for Civil Works. I work for one of your former colleagues, Martin

Lancaster. With me today are representatives from the Corps Sacramento District and a representative from the Corps' headquarters Emergency Management Office. Mr. Pombo, I too will summarize my statement, and with your permission, submit the full written text for the record.

While my statement today focuses on activities in the California Central Valley and its recent devastating floods, the basic tools used by the Army Corps of Engineers to address flood protection and environmental issues apply across the nation.

Let me say upfront that we believe that implementation of the Endangered Species Act is not inconsistent with the need to build, maintain, and operate flood control infrastructure. We know today that it is not only vital to protect human safety and property, it is also important to protect our natural resources.

Using existing regulatory provisions under the Endangered Species Act and the Clean Water Act, we are able to maintain the important balance between flood protection and natural resource protection. In fact, with existing exemptions, emergency provisions, and general permits, it is rare that a detailed Federal evaluation is required for maintenance and repair of flood protection levees.

For example, in January of 1997, the Sacramento District issued a general permit for those nonexempt emergency flood repair activities. Since that time, that district has issued over 30 permits for specific activities with the average turnaround time anywhere from two hours to two days.

The Corps enjoys a solid working relationship with Federal and State resource agencies. We work together to ensure that flood control projects go forward in a timely manner with minimal adverse effects on the environment. A good example of this working relationship is the emergency floodfighting work that was done following the New Year's storm in California.

As soon as the Corps became involved with fighting levee breaks, we coordinated with the Fish and Wildlife Service and the State of California Fish and Game to obtain guidance on endangered species consultation. Both agencies stated that an initial consultation was not necessary to initiate emergency levee repairs during floodwide conditions. Instead, concerns or requirements for endangered species mitigation would be addressed once the floodfight ended. The emergency work went forward without delays for environmental consultation.

And now that the Corps is in the rehabilitation phase of levee reconstruction, the Fish and Wildlife Service continues to work closely with our Sacramento District so that we may expedite the site evaluation process and, ultimately, the final levee rehabilitation before the next flood season.

The Fish and Wildlife Service and the State Fish and Game representatives accompanied the Corps team as they conduct site visits. A determination is made on-site of any ESA, NEPA, or California Environmental Quality Act concerns or habitat mitigation requirements.

After the Corps and the Fish and Wildlife Service have determined what mitigation measures can be reasonably and practicably implemented to protect endangered and threatened species and other environmental values, those measures are implemented as the rehabilitation and reconstruction work proceeds, or as soon thereafter as is practicable.

It is our strong belief within the Department of the Army that both human needs and our natural environment can be given appropriate consideration, and the decisions regarding flood protection and development issues should reflect both sets of considerations.

The Corps recognizes that environmental laws such as the Endangered Species Act and the Clean Water Act are essential to ensure the protection of our nation's resources. While it is true that at times construction schedules and practices have been modified to address environmental concerns and requirements, this does not interfere with our ability to provide the design level of flood protection. We continue to work with the other agencies to improve these programs and to further reduce delays where possible.

In the Chairman's letter of invitation, they asked for comments on H.R. 478. Let me express the Department of the Army's strong opposition to H.R. 478. We do not believe that it is necessary to allow us to deal with flood protection or flood emergencies. Moreover, its broad approach will result in unnecessary impacts to threatened and endangered species.

The recent floods in the Northwest and central California, the Ohio Valley, and now in the upper Midwest have caused substantial damage to property. They have cost taxpayers billions of dollars, and, most importantly, they have cost human lives. No agency is more sensitive to this devastation than the Army Corps of Engineers. Our dedicated field staff witnesses firsthand the destruction and the fears of landowners.

It is time that we seriously reexamine our floodplains and our floodplain policies. We must ask if our current approach is sustainable in terms of flood protection, in terms of the fiscal investment required, and the impact on our natural resources. Our short-term objective must be to help communities recover from the devastation. However, our long-term objectives must be one that includes a serious look at all options, not just an automatic return to structural solutions that may no longer be appropriate or effective. If we carefully evaluate all options, we can demonstrate that we do not have to choose between flood protection and environmental protection. Mr. Chairman, that concludes my statement.

[Statement of Mr. Davis may be found at end of hearing.]

Mr. POMBO. Thank you. Mr. Michael Rausch.

STATEMENT OF MICHAEL RAUSCH, UPPER MISSISSIPPI, ILLINOIS, AND MISSOURI RIVERS ASSOCIATION, QUINCY, ILLINOIS

Mr. RAUSCH. Thank you, Mr. Chairman, and members of the Committee. I am Michael Rausch. I am Treasurer of the Upper Mississippi, Illinois and Missouri Rivers Association. My testimony is presented on behalf of our Association.

Our Association was created in 1954 and has been expanding, particularly since the great flood of 1993. Our membership includes individuals, businesses, and municipalities which are all interested in the continuing improvement of flood control, navigation, economic development, and habitat protection along the rivers of the Midwest.

The United States Army Corps of Engineers has transformed these great natural resources into the essential centerpiece of our Midwest economy. In the 1930's, the navigation system was modernized, and our great transportation infrastructure advantage was established. Today, however, that infrastructure's advantage is quickly deteriorating, and our state-of-the-art system is in imminent danger of being inferior to numerous other areas of the world.

Those in the Midwest who provide the resources to keep our economic engine running have been pleading for improvements. Many environmental interest groups have been lobbying to block those efforts or any other improvement in flood control systems on the incorrect presumption that improvements to navigation or flood control will harm fragile ecosystems or habitat.

The Midwest economy and environment can prosper together. This will not occur if a proper balance and consideration for flood control, economic development, and recreation is not quickly implemented. The instability of a poorly maintained flood control system prevents economic growth and stable recreation, while causing erratic food production and a less efficient navigation system.

The greatest threat to river transportation and wildlife habitat is the accumulation of sediment in the rivers. The Corps, during the past 35 years, has seldom removed dredge material from the floodway in the upper valley. The material have been placed within the floodway on islands, beaches, or in deep water where it is deposited back in the navigation channel or upon wildlife habitat at the next time of high water. This practice should be stopped and the dredged material placed outside the floodway immediately.

Efforts to remedy this problem of sedimentation are being delayed and prevented by those who wish to turn the great resource of our Midwest rivers into a quasi-national park. Government programs are even funding placement of millions of tons of rock in the rivers and building structures and islands in the river. Current action and inaction is increasing the risk of flooding and increasing the inefficiencies of navigation.

In the meantime, if a city, industry, or community wants to improve their economic base by improving flood control, the idea is declared either economically impossible by the current cost benefit formulas or alleged to be environmentally damaging, immediately making it politically imputable and, thereby, impossible to implement.

We do not really know the full impact of the Endangered Species Act on the ability of the government to provide adequate flood protection. We do know that the fear of the Act and the related costs and delays associated with threatened environmental issues rising under the veil of the Act have caused serious compromise to most flood control activities in our area.

Maintenance of levees has been prevented or delayed due to alleged critical habitat of the Indiana bat. Dredging to repair levees was delayed due to concerns for mussel beds and the Higgins eye clam. During the 1993 flood, levee districts that had been flooded could not be intentionally breached to let water out until Federal and State agencies were satisfied that habitat surveys were completed which caused much additional damage to the particular district during the delay.

Another specific case involves a pecan grove that was killed on the Illinois River during the 1993 flood. The local office of the Federal Soil Conservation Service had approved a plan for removal of the dead trees and replanting of such in October 1994.

In January 1995, the Corps of Engineers notified the owner that his actions might require a Section 404 permit. One week later, the Corps issued a cease and desist order threatening a $75,000 per day fine and possible imprisonment to restore the area to its previous condition.

After one-and-one-half years of red tape, a Section 404 permit finally allowed restoration work but nearly was denied because of concern regarding the endangered Indiana bat. This was the official action and position even though the Corps of Engineer personnel indicated there had never been a bat sighted in the area, but that there was a possibility that one could stray into the dead pecan grove.

The Section 404 permit was subject to two pages of conditions, which I have attached to my testimony in the written record, including the restriction against it doing any work between May 1 and September 1, obviously the best, most cost-effective time to do this type of work, to protect these nonexistent Indiana bats.

The Corps of Engineers is facing the issue of altering the water flows of the Missouri River in part to accommodate the presumed needs of the piping plover, a lesser tern, and the pallid sturgeon. This seems to be totally influenced by the Endangered Species Act concern with very little concern about the communities, businesses, and property owners on the downstream reaches of the river.

Additional attachments to our testimony have been submitted to the Committee for your reference. They expand upon the use of the plover and tern as instruments to prevent flood control development. Most interesting might be the attachment with excerpts indicating how people are instructed on ways to use the Endangered Species Act as a tool to prevent other activity they wish to stop. This strongly indicates that the ESA is primarily being used to implement an agenda to prevent growth and respect for human needs, concerns, and rights.

Mr. Chairman and members of the Committee, we certainly thank you for the opportunity to make our statement before you. You are dealing with a very critical issue that affects our part of the country, as well as every other area of the country. We strongly support the amendment being considered and referred to as the Flood Prevention and Family Protection Act of 1997.

We certainly need this common sense improvement in a body of administrative regulation that has reduced human incentive, prevented improved flood control, and delayed or prevented efficient economic development. We must establish a legislative priority and administrative system to maintain and improve our infrastructure including flood control structures and human concerns. Thank you very much.

[Statement of Mr. Rausch may be found at end of hearing.]

Mr. POMBO. Thank you. Mr. Guenther.

STATEMENT OF HERB GUENTHER, WELLTON-MOHAWK IRRIGATION AND DRAINAGE DISTRICT, WELLTON, ARIZONA

Mr. GUENTHER. Thank you, Mr. Chairman, and members of the Committee. My name is Herb Guenther. I am the Executive Assistant with the Wellton-Mohawk Irrigation and Drainage District in Wellton, Arizona, which is located along the Gila River in southwestern Arizona, about 50 miles east of Yuma.

The district that I represent provides Colorado River water to about 62,500 acres of prime agricultural land, and we are also responsible for flood protection along 60 miles of the lower Gila River. The lower Gila River is normally a dry river. In early 1993, however, we did experience a 500 year flood event, one that filled and spilled all the reservoirs on the Gila and Salt River upstream in the Phoenix area.

Painted Rock Reservoir, which is a Corps of Engineers flood control facility, is located about 70 miles upstream of our district. Our flood control facilities were designed to handle a 10,000 cubic feet per second release from Painted Rock Dam, and were about 98 percent complete at the time of the '93 flood.

The Painted Rock Dam filled and spilled. Again, it was a 500-year event, and the peak uncontrolled releases reached almost 26,000 cubic feet per second. So, obviously, with a 10,000 cubic foot per second project design, we had problems.

The damage to the public facilities in our irrigation district exceeded $100 million. That is to only public facilities. So, of course, we needed disaster recovery assistance, and it was a federally declared disaster so we applied for that assistance under the Stafford Act.

Shortly thereafter, we were notified by the Corps of Engineers and the Federal Emergency Management Agency that we would be required to obtain a 404 Clean Water Act permit, for those areas of our project restoration that were located within waters of the U.S., and we would have to get a NEPA, National Environmental Policy Act, clearance for the remainder of the area.

Now, those requirements by themselves, the NEPA requirement and the Clean Water Act requirement, opened up the other cans of worms, if you will. It opened up the Endangered Species Act, the National Historic Preservation Act, Section 106, the Executive Order on Floodplains 11988, and the Executive Order on Wetlands 11990.

That leads us to the second problem, and that was that before we could restore the flood protection that we had enjoyed prior to the flood event, we had to go back through a full-blown environmental compliance process.

I am a fish and wildlife biologist by training. I have spent 26 years either working with or for the Federal Government in environmental compliance. I cut my teeth on the Endangered Species Act and the National Environmental Policy Act, and I have never, ever been involved in anything as nightmarish as the last four years in trying to get environmental compliance to restore the flood protection system that was destroyed by a 500 year flood event disaster.

In this instance, the Endangered Species Act did not prove to be a real problem. That was primarily because the Fish and Wildlife

Service in our area used common sense, that the "moonscape" that existed following the flood would not support the Yuma clapper rail or other endangered species that might be found. I mean, there was no habitat left. It was gone. It was denuded.

So the ESA was not a major problem. However, it did lead to a Notice of Intent to Sue by some environmental groups which is still pending. It was a 60 day notice letter. Our major problem revolved around the environmental compliance including the Clean Water Act, both Section 404 and 401, as well as the NEPA requirements for the environmental assessment and the National Historic Preservation Act, Section 106, and as I have mentioned, the executive orders.

We had to prepare the environmental assessment. We had to do a wetlands analysis. We had to do the 404 reports, the 404 justification plan, the 401 substrate analysis, and develop a total mitigation plan which was negotiated with the Fish and Wildlife Service and the local State game and fish agency.

Also involved in the negotiations was, of course, the Corps of Engineers, from whom we sought the 404 permit, and the U.S. Fish and Wildlife Service, from whom we had obtained the Section 7 finding of no effect.

We also had to prepare and negotiate a 106, National Historic Preservation Act treatment plan, on a previously 106 certified rock quarry. Now, the EA which was very controversial, led to the Corps of Engineers finding of no significant impact which was based upon a fully mitigated restoration project.

However, EPA continued to demand the preparation of a complete environmental impact statement. And, again, we are just trying to put the thing back the way it was and to restore the flood protection. This is not a new project. It is not a different project.

The controversy over the environmental assessment led to litigation on behalf of some environmental groups, and that litigation is continuing as we speak. We currently are in the 9th Circuit Court of Appeals where the Plaintiffs are appealing a judgment of the District Court. Also, it led to FEMA denying funding and looking for another agency, namely, the Corps of Engineer, to fund it under their P.L. 84–99 program.

But now the bottom line is, we are four years after the disaster. We are still trying to complete the environmental clearance. We are still trying to secure funding. We are still without flood protection for the area, and the $43 million Federal, State, and local investment in nonflood infrastructure restoration remains in jeopardy.

And, lastly, we are still involved in the frivolous litigation which has already cost us over $160,000 in legal fees. We support the House Resolution 478. However, we feel it doesn't go quite far enough. We feel a bigger umbrella for compliance relief, such as the ESA and NEPA, is justified. While we don't necessarily need an exemption, we think there should at least be a process whereby we can expedite the reviews that are necessary following federally declared disasters and the recovery therefrom.

I thank you for the opportunity to testify here today, and I have submitted my written comments and ask that they be made a part of the record.

[Statement of Mr. Guenther may be found at end of hearing.]

Mr. POMBO. Thank you very much. Ms. Cunniff.

STATEMENT OF SHANNON CUNNIFF, DEPUTY EXECUTIVE DIRECTOR, FLOODPLAIN MANAGEMENT REVIEW COMMITTEE, WASHINGTON, DC

Ms. CUNNIFF. Thank you, Chairman, and Committee members for giving me the opportunity to testify before the House Resources Committee on the findings of the Floodplain Management Review Committee on the 1993 Midwest floods. With your permission, I too would like to summarize my prepared remarks.

In 1993, the Midwest was hit by disastrous flooding. It was a disaster that led many to question how the Nation manages its floodplains. The Review Committee was created to independently review the causes and consequences of the '93 flood and to review the recovery efforts. I served as its deputy director.

Our report's recommendations are those of the Review Committee's and not the agencies who supplied staff. Our report, which I have brought with me, is based on research and extensive interviews with State and local officials, nongovernmental organizations, and numerous private citizens.

The Midwest flood of '93 was basically a flood of record or several floods of record and demonstrated that people and property remain at risk. Activities in floodplains even with levee protection continued to remain at risk. The one important lesson of the '93 flood is that the Nation needs to do more to minimize the risk of damage from floods. The difficulty is that no single action will suddenly reduce the vulnerability of those at risk or prevent others from becoming at risk or being put in the same position.

We found that the basin contained an uncoordinated collection of agricultural levees constructed by different agencies and individuals at various times and under various programs. The majority of levee breaches were caused by overtopping. We found that the primary factors contributing to levee breaks were, first and unsurprisingly, a great deal of water for a long time. And, second, the placement and design of construction of the levees themselves.

Poorly sited levees can be expected to fail again. We identified inadequate levee maintenance as a possible factor contributing to levee breaks. We did not find, nor were we told of, any situations where environmental protection statutes were the reason for inadequate maintenance.

Protection and recovery of endangered species did not adversely affect scheduled levee repairs. Measures to avoid and reduce the risks of flooding can be compatible with environmental protection. In fact, protection and restoration of the natural and beneficial functions and values of floodplains are crucial elements of any plan to reduce risk and damage from floods.

The Review Committee proposed a better way to manage flood risk. The historical focus primarily on structural "flood control" solutions should be replaced with a sequential strategy of avoidance, minimization, and mitigation. Where the risk cannot be avoided, damage minimization approaches should be carried out but only when they can be integrated into an overall basinwide systems approach to flood damage reduction.

To enhance floodplain management, attention to the environment during Federal operations and maintenance and disaster recovery activities needs to be increased. Existing authorities to acquire lands from willing sellers should be funded and expanded. And legislative authority to increase post-disaster flexibility is needed to assist relocation efforts.

Full consideration needs to be given to all of the possible alternatives for vulnerability reduction. Vulnerable population centers and risks to critical infrastructure should be reduced through the use of floodplain and watershed management activities where appropriate. States should be responsible for siting, design, and assuring maintenance of non-Federal levees.

Now, before I conclude my remarks, I would like to emphasize that while the flood of '93 was an unprecedented hydrometeorological event, floods of this magnitude can happen again. Although we can't predict or stop floods, we can adopt a new approach to floodplain management that will lessen our vulnerability to the costly damages caused by floods. I would be pleased to answer any of the Committee's questions.

[Statement of Ms. Cunniff may be found at end of hearing.]

Mr. POMBO. Thank you very much. Mr. Davis, you said in your testimony that a January '97 exemption was given that allowed the floodfight to begin or the repair of the levees—that process—to begin. And I don't think anyone who worked through that system that we went through between the 1st of January and today can criticize the actions that the Corps took. I think that they did an exemplary job of fighting the flood to begin with and then immediately trying to patch the holes as quickly as they can.

But the problem was not what happened between January and today, the problem was that we went through 15 years of delays on maintenance and routine maintenance of the system before we ever got to the point that we had this catastrophic event. And how do you go back now and say what mistakes did we make before January happened, and how do we improve those?

Mr. DAVIS. Mr. Pombo, let me say that we are always looking at our programs and looking for ways to improve them because we certainly can do that. But when I mentioned the January '97 permit, I think it is important to put that in the proper context. That was a permit that was issued to complement existing relief mechanisms that have been in place for some time.

For example, we have had a general permit in place—a nationwide general permit for the maintenance and repair of levees and flood control structures for many, many years going back I believe into the late 70's perhaps. That has been in place. We have had other general permits in place. There are some statutory exemptions that have been in place that the Congress provided in '77. So this January permit was to complement some existing things that were not already covered by this so it has provided some additional relief.

Mr. POMBO. Excuse me, but with all due respect, everything that we have heard—that I have heard over the past several years has been that there is a problem, that, you know, you get a permit. You call in Army Corps, and you put in your application for a permit to do maintenance work. And you begin that process that you are going through.

And because of Section 7 consultation, you bring in Fish and Wildlife as well and what other Federal agencies in that become involved in that process. And you end up with an extremely cumbersome process that it has to go through, and you have heard testimony earlier today, I am sure, that you are personally aware of situations where projects were delayed for several years.

You have two people that are on the panel with you that have testified about delay in projects because of the regulations and the way they are currently being implemented. How can you then go back and say that ESA is no problem, that it hasn't caused a problem even though all of these people have testified, with your own personal involvement with this?

I know for a fact that you have personally been involved with some of these cases of regulatory problems that have come up over the years. How can you then justify saying it is no problem? Isn't that shortsighted? Should not it be a question of these are the problems that we actually did have. Here is our suggestion from Army Corps of how to fix it so it doesn't give us a problem in the future?

Mr. DAVIS. Again, we are always open to suggestions, and I think that we can always find cases where we have examples of where the system didn't work as efficiently as it should have, and we ought to look at those. But on balance, when you look across the spectrum of things that are going on out there, we think it works pretty well, and things are generally going forward with minimal requirements and, in many cases, absolutely no requirements.

The vast majority of the actions under the 404 program, for example—83 percent plus are covered by a general permit. They get a decision in 16 to 20 days on average. You can always pick a few cases where it didn't work as well as it should have, but on balance I continue to believe that it works pretty good.

Mr. POMBO. Well, sir, you say that you are always open to suggestions, and you are interested in hearing different ideas. The response that we have received from the Administration at this point has not been, "These are the things that we would change about the legislation. These are the problem areas that we have seen come up." The only response that I am aware of to this point is, "The Endangered Species Act hasn't been a problem, and we don't think anything needs to be changed."

I mean, if this is going to be a dialog, if we are going to work toward solving some of these problems—and believe me, the people that have testified truly believe that the Endangered Species Act is a problem. They truly believed that the delays sometimes for years in maintenance projects were caused by the implementation of the Endangered Species Act.

They truly believe that, and I tend to believe that maybe those that are working firsthand on this, the levee district managers, the reclamation district managers, may have a close idea of how the Act is being implemented out there, how it is happening actually in the field. And when they come in and say, "This is a problem. We need to fix it," I don't think our response should be, "No, it is not. We are not going to fix it."

So how do we go about making those changes? How do we get your agency, for example, to actually look at the legislation and say, “These are the changes that we would accept. These are the things that we would not”?

Mr. DAVIS. This Administration has been very effective, in my opinion, about taking on problems with the Clean Water Act, Wetlands Program, and the Endangered Species Act Program, and I will let Secretary Garamendi comment on the ESA part of this.

But we have taken very aggressive and substantive steps over the last three or four years to address legitimate problems. We may not be all the way there yet, but we are still working on it. We will engage in a dialog with the Congress to discuss these issues. What we will not do is engage in a dialog that substantially rolls back any environmental protection.

Mr. POMBO. Mr. Garamendi, in your statement—and I don't believe it was in your written statement, I believe it was just in your testimony—you said that if H.R. 478 were adopted that it would encourage development in the floodplain, that it would encourage further development of floodplain. Does the Endangered Species Act currently prevent development in the floodplain?

Mr. GARAMENDI. It could depending upon the nature of the habitat or the creatures that are in the floodplain. If there are endangered species in a particular section of the floodplain, it could prevent development in that area.

Mr. POMBO. So, currently, the Endangered Species Act is preventing development in the floodplain, am I to understand you correctly?

Mr. GARAMENDI. In certain areas there are——

Mr. POMBO. In certain areas it is preventing?

Mr. GARAMENDI. In certain areas where there are endangered species, there may be prohibitions from some kinds of development.

Mr. POMBO. In your written testimony, you say that the presence of any listed species prevented the proper—nor has the presence of any listed species prevented the proper operation and maintenance of flood control facilities prior to the recent floods. In light of some of the testimony that we have heard here today, how would you answer some of the people that have testified that the current implementation of the Act has delayed the proper maintenance of some of these facilities?

Mr. GARAMENDI. Perhaps you could refer me to specific testimony that you are referring to? As I listened to the testimony, Mr. Lee's testimony, for example, he spoke of the Thornton area. The maintenance at the Thornton levees was prior to 1986 and was not an issue of the Endangered Species Act at all but rather funding issues and general maintenance. That levee broke in 1986. It did not break subsequent in this year and in intervening floods.

He said that the levee had to be set back six feet. I suppose we should all be thankful that it did have to be set back six feet because that increased the channel capacity by that six feet. It is hard to say what would happen if they were allowed to build the levee six feet closer to the river. My guess is it may have gone over the top this time. It was, in fact, a funding issue that delayed for five years that particular levee maintenance in Thornton.

I think we heard testimony from Mr. Guenther here from Arizona that the Endangered Species Act was not an issue in the question—in his particular area. We find all kinds of specific issues. We must deal with the specificity.

In Mr. Herger's case, it was not the Endangered Species Act that caused the delay of 10 years. The first four years was a study by the Army Corps of Engineers, and there were several years of—a couple of years of that delay were caused by congressional debate over the amount of money and which areas were to be studied first.

The Endangered Species Act did not cause a delay in the maintenance in the area where the levee broke, and you heard testimony to that effect. So it is not the Endangered Species Act that is causing this. It is a factor, along with many other factors, in the general design of levees, in the maintenance, and in the reconstruction—not in the reconstruction, but in the construction of new levees. And it is a factor that we must take into account.

You have also heard testimony today that we must rethink how we design and protect ourselves from floods. The design of the flood system in the Central Valley is to build the levees as close to the river as possible, which inevitably means that those levees will fail and they have.

We have to rethink that, and that is our policy—to rethink, to redesign, to set back the levees to allow the river more room so that there will be more channel capacity. And in doing that, we will also create better opportunities to protect all of the species whether they are endangered or not.

Mr. POMBO. My staff came across a memo that was issued in 1985 by the Department of Interior, and it talks about a project of bank stabilization project for the Chico Landing to Red Bluff in the Butte basin section of the upper Sacramento River.

Project proposed by U.S. Army Corps of Engineers, and included in this memo was a press release that was sent out by a then member of the Assembly that includes the statement, "The project's death blow was recently delivered when the U.S. Fish and Wildlife Service invoked the Endangered Species Act earlier this month to halt a riprap project."

This is not something that just occurred in the last two years. This is something that I think most of the reclamation district managers will testify to has been ongoing. It is something that has been a problem, that has built up over the years.

If we would have had this kind of a flood event in 1985, we probably wouldn't have had the kind of breaks that we did this year. But after several years of delays of projects—of work that should have been done that was not done, we ended up with a situation where the system could not handle as much water as it could have otherwise.

That is not to say that we would have no flooding in the absence of this. I don't think myself or Mr. Herger has said that we would have had no flooding. But we would have had less, and the system would have done the job it was designed to do.

I have just one final question to Mr. Rausch. Is it your opinion that the Endangered Species Act has played no role in the delay of the routine maintenance and proper operation of any of the flood control systems that are in your area?

Mr. RAUSCH. No. To the contrary, I mean, we have had instances where levee districts have been precluded from gaining efficient access to their levees for maintenance by the most direct route and things like that under the guise that there was some habitat that might have been compromised.

Certainly, the repair after the flood was very directly affected from our perspective in terms of the delays precipitated. As I mentioned, one situation in my levee district that was completely under water, a 20,000-acre lake.

The only fashion that we could get the water off of there was to gravity drain it through the lowest portion of the levee by effecting an artificial breach in that levee. And it was delayed many weeks by studies of the track that the water would take as it left the district across a government swatch of land about 3 or 400 feet wide.

Mr. POMBO. Thank you. My time has expired. Mr. Herger, do you have any questions at this point?

Mr. HERGER. Thank you, Mr. Chairman. And I want to welcome Mr. Garamendi here in your position as Secretary. It has been some years ago that we served together in the State legislature; you in the Senate and myself in the Assembly at that time.

I do find quite alarming some statements that both you, Mr. Garamendi and Mr. Davis, are making. I find it just incredible, near unbelievable, how the Administration can claim that there aren't any delays. We have example after example after example of how the Endangered Species Act has delayed levee repairs, and we have had breaks afterwards. I really find it difficult to understand how you can sit there and say it isn't.

And, Mr. Garamendi, you are asking for a specific. I would like to once again quote a specific and have both you and our Corps of Engineer, Mr. Davis, comment on this on how you can say that the Endangered Species Act did not prevent this levee repair.

And let me just go over again—and why it is so serious is three Californians—constituents of mine, constituents of yours, Mr. Garamendi—lost their lives here on the 2nd of January. They lost their lives right in front of a levee that broke, that was identified to be repaired—and maybe you didn't hear this testimony—maybe you haven't looked at this. This is an example. I don't know how we could find a more glaring example. I don't know how you can ignore this and deny this.

The reclamation district identified a problem in 1986. That is almost 11 years ago. Because of the Endangered Species Act specifically, they needed a study. The Corps wouldn't repair it until they had studied it. Four years later, the Corps finally finished studying this—in 1990.

In 1990, your people, Mr. Davis—your people wrote, and let me quote again—this is a quote from your people, the Corps of Engineers, "Loss of human life is expected." Loss of human life. Now, we are trying to protect the elderberry beetle, but, "Loss of human life is expected under existing conditions without remedial repairs for major flood events."

Well, we didn't repair that levee in 1990 when we found it, when you stated that four years after the reclamation district stated that their engineers noticed it. They didn't repair it in '91, didn't repair it in '92, '93, '94, '95, '96; they didn't repair it.

Finally, in spring of '97, just coming up, the Corps, because of the ESA, because of studies that were required, because of mitigation that was required, some 11 years later, it is finally getting around to repair a levee. What the law of averages are—and I am not a gambler, but if you roll the dice enough times, sooner or later it is going to break, and it did break, and three people lost their lives.

Now, I am curious. How can either of you with a straight face sit there and tell me that the ESA had nothing to do with this? Would you answer that please?

Mr. DAVIS. Congressman, I will go first here.

Mr. HERGER. Thank you.

Mr. DAVIS. And let me just say that, obviously, there is nothing I can say that mitigates the loss of life and the tragedy that occurred there. But I think it is important to understand all of the issues that resulted in the delays, and perhaps the Endangered Species contributed.

But there were other substantial and perhaps even more significant contributing factors in the delay there, like the difficulties in purchasing a right-of-way, like the modifications to contracts that were made at the project sponsor's request. There are other things in the list here that contributed to the delays here. If the Endangered Species contributed, perhaps it did. It certainly wasn't—it was in a long list of other things that also played a major role in this problem.

Mr. HERGER. Now, let me ask you something, Mr. Davis. If the legislation which I have introduced, whose purpose is not to build more dams, even though I believe we need more reservoirs, and I believe years like this show that we do, and drought years also show it—that is not the purpose of this legislation.

I am more than willing to amend it where it does not include the building of that if that is the concern of the Administration or anyone else. The sole purpose of this legislation is to go in and be able to do shortly after 1986 when it is identified by people who are experts that a levee needs to be repaired to protect loss of life and property that we be able to do it.

Now, let me ask you something, and I want you to answer this—not that you wouldn't, but I want to state it anyway—I want you to answer it truthfully, if there were not the Endangered Species Act, how soon do you think we could have gotten in there and repaired that levee?

And let me ask you this. Do you think we could have done it in eight years without the Endangered Species Act? Now, sure, there were some, some delay, but very little in the areas that you are talking about—maybe a year or two or something.

But do you think they would have been repaired within eight years? Because if they were, three people's lives who lived directly in front of that break would have been alive today. What is your opinion? Would they have been repaired within eight years or less?

Mr. DAVIS. Well, Congressman, let me say that I would certainly——

Mr. HERGER. Nine years and they are still not repaired.

Mr. DAVIS. Let me say that, first, I would certainly always answer truthfully. I cannot give you an answer in terms of the incremental increase in time associated with any factor here, but, again, there were funding problems. There were other problems. We will certainly be glad to try to analyze this for you and get back to you for the record.

Mr. HERGER. Well, that is not an adequate answer.

Mr. DAVIS. Well, my second——

Mr. HERGER. And that is not a truthful answer. The fact is it would have probably been done within a few years. There were $3 million that were put up by the Federal Government earlier on to repair this. We had money there. We have spent $9 million just on mitigation on a repair that would have only cost $3 million. And if we can't repair a levee in less than 11 years after it is identified, we need some major changes with the Corps of Engineers.

Do you have a comment, Mr. Garamendi, on how the Administration can defend the loss of three lives and the stalling of 11 years directly because of the ESA or at least the vast majority of that?

Mr. GARAMENDI. Mr. Herger, we, like you, are grieved and concerned by the loss of human life. And this Administration and the Federal employees, State employees, and local employees made extraordinary efforts to protect human life.

The project to which you are referring is a long-term rehabilitation project of a major stretch of California river. It is a phased project, phased over many years principally because money is not available in any given year to do the entire project. You know this.

You also know very good and well that this particular project is one that began with the 1986 floods. A study was commissioned by Congress which took a while for Congress to get the study together, to get the legislation, to get the funding. That study took a couple of years to complete. In 1990, the study was completed.

Obviously, there was danger in here because this levee in this area failed—a levee in this area failed in 1986. It was well known that these were dangerous levees. There is no surprise about that. There is nobody debating that.

But these projects do take time. They take time because Congress takes time, because you don't have the money. The American public doesn't have the money to do these things initially. It is incorrect to say that the Endangered Species Act is the sole cause for the delay of this project. It is not. It is not the cause. It is not the only reason.

There is also the well-known fact that the specific project in this area was not completed in 1996 because of a contractual dispute that took place. That is reality. It is terribly unfortunate that the project was not going forward as it was expected to go forward.

Now, we have to consider where do we go from here? If we are going to look to the Endangered Species Act as being the cause of the problem, we are being foolish. There are many, many factors that need to be taken into account in designing a flood system that protects California.

If we continue to build the levees right up next to the river, we will never have the money to build them high enough because there will be another storm that will overtop or cause some levee to fail. We need to be wise.

We need to take into account the information that was developed in the Galloway report and apply it to California. That is where our effort needs to be. We need to apply our intelligence, our creativity, and our time and effort to designing a system that accounts for very large floods.

We need to set back some of these levees. We need to maintain and we need to improve other levees, and we ought to be about that business. That is what this Administration is trying to accomplish in changing national policy so that we have a system that accommodates the fact that major storms occur.

I have been in the flood business for 25 years. I live in an area that is subject to flooding, and every year there is another storm that exceeds anything that had ever been imagined. So we had better get wise here and prepare for storms that exceed our imagination. And, in part, that is restoration and reconstruction. In part, it is designing a different system than we presently have.

Mr. HERGER. Well, thank you, Mr. Garamendi. And we are in partial agreement. I couldn't agree more with you on the fact that we have to begin looking at the entire watershed system from the mountains where the snow falls to the ocean where the levee system travels. We can't just patchwork our system as we have in the past——

Mr. GARAMENDI. To an ocean that is also rising.

Mr. HERGER. To that extent, I agree with you very much, but, again, to somehow state that it should take from after the study is completed in 1990 to beyond 1997 where they found the elderberry beetle, and because of the elderberry beetle there was litigation going on, and there was actually a wetland that was created inside the levee system that was dug below where the bottom of the levee was, which allowed for seepage—which many feel and some engineers feel further contributed because of endangered species litigation—directly because of that, that we have a major problem. And I believe that if the Administration continues to ignore this and try to excuse somehow that seven years with it still not repaired, and let me just for the last time quote——

Mr. GARAMENDI. Mr. Herger, it is——

Mr. HERGER. Now, I am speaking now. I will let you finish speaking—where the Corps of Engineers themselves says that, "Loss of human life is expected under existing conditions." That is in 1990—that we can go until 1997 and still not repair that is wrong.

Mr. GARAMENDI. Mr. Herger, the project is a multiyear project. Work has been ongoing for several years on this project beginning first with a comprehensive study of the area to be protected. It takes a couple years. I think it took three years to complete the engineering studies to determine how to repair the levees, which ones needed to be improved, and repaired.

And then work began, funding cycles—you are very much aware of the funding cycles here in Congress. You don't fund the entire stretch of river. You fund sections in multiyear projects. This project has been underway for some years. It is not fair to say—it is incorrect to say that nothing has been done in this area.

This particular stretch was supposed to be done in 1996. It was delayed for the reasons I stated earlier. Now, it also happens to be that that language that you read is in most every Corps of Engineers report as accurate justification for the project.

Mr. HERGER. Now, I have a memo here that says that the EIS had scheduled to commence in the spring of '93—we can talk back and forth, and let me just conclude with this, Mr. Garamendi. And, again, I do thank you. If I seem a bit upset, it is because there is a number of families who I represent that are very upset.

Mr. GARAMENDI. I understand.

Mr. HERGER. There is a number of families I represent throughout the Sacramento Valley, and I really believe I am speaking for the entire nation, who live around rivers, who have built homes, who have maybe had family farms, and I know your family has, for several generations that deserve to have their property and their lives protected.

And any system that allows us to go and litigate for seven years because of a study that indicated that there was an elderberry beetle there is wrong and needs to be corrected. And let me just conclude with that, and I thank you for your testimony.

Mr. POMBO. Thank you. Before we conclude, there was a statement made earlier that this bill would contribute to a false sense of security amongst the people that live in floodplains. I think people have an assumption that the levee system was designed and built to give them that sense of security. And I think that we as policymakers have the responsibility of ensuring that that assumption is carried out.

When the Chairman asked the local Army Corps of Engineers in Sacramento to answer a list of questions after this occurred, the one question that was asked was whether or not the Endangered Species Act had delayed any of the projects, and the answer came back that, yes, it had delayed projects in the Sacramento area.

One in specific was a project in Reclamation District 1500 that was delayed because of various factors, one of which included potential impacts to the giant garter snake, a threatened species. Additionally, work on the Sacramento River Bank Protection Project continues to be delayed in an effort to reach consensus with Fish and Wildlife Service on requisite mitigation for impacts.

So to say that it has had no impact I think is a misstatement. To say that—I guess blindly put your head in the sand and say that we are not going to change anything, that we are just going to pretend none of this happened and that the Endangered Species Act played no role I think is a mistake.

I don't think that Mr. Herger or myself have ever made the statement that the Endangered Species Act was the sole reason for flooding. I don't think that either one of us has ever made the statement that if this legislation had been adopted, we would not have flooded.

I think, more accurately, the Endangered Species Act has played a role, in some cases a significant role, but a role in contributing to the levee system, the flood control system not being able to handle as much water which resulted in some of the floods. And I think that that is the problem that we are trying to correct. I think it is a very serious problem.

I think that the legislation that Mr. Herger and myself introduced earlier this year was an attempt to go down the road to solving that one particular problem that both of us have heard quite extensively about from our districts.

If the Administration has recommendations for ways that we can fix this, of other ways that we can do this, I know that myself, and I am sure Mr. Herger, are more than happy to listen to any suggestions that you may have of ways that we could fix that. Yes, sir?

Mr. GARAMENDI. If I might, Mr. Chairman, specifically for the Central Valley of California, we have at hand an opportunity to achieve the goal you just stated. We can make major progress in fixing the flood system and flood control system in the Central Valley of California.

The Bay-Delta Program, together with the supplemental appropriation legislation that is presently before Congress, provides us with that opportunity. Embodied in the Bay-Delta Program and Proposition 204, which was supported by the people of California last November, is a major flood control component.

There is a substantial amount of money available for the reconstruction design of the levee systems in the Sacramento-San Joaquin basin so as to provide improved habitat, some of which would be valuable for endangered species, and at the same time increase the capacity of the system to handle these extraordinary floods that we have had.

We are all—this Administration and this Congress has that opportunity in the next several months to pass that legislation, to appropriate the necessary money. If that occurs, then we all—State, Federal, all stakeholders—can move rapidly forward to not only improve the levees that Mr. Herger is so concerned about, and correctly so, but also to set back levees to create meander zones, floodways, bypasses, surge areas, and other kinds of very important flood control facilities, and at the same time habitat facilities. We can do two things at one time.

My concern with this legislation is that it takes us off target, and it does, in my view, provide a false sense of security, and it doesn't really solve the problem. I did not mean to imply that the Endangered Species Act is never an issue.

We do not see it as an issue in the flooding that occurred in California this year, but we do have this very positive opportunity to move forward. And I know that this Congress will be dealing with this, and we certainly would hope that we can work together to accomplish that.

Mr. POMBO. Well, I appreciate your comments, Mr. Garamendi, but I think that with the simple fact that the proposals that you talk about—set back levees, flood areas, and such—under current law would not be exempt from these same regulations either.

Mr. GARAMENDI. No, they shouldn't be.

Mr. POMBO. And we would be talking about several years of delay and studies. I mean, Mr. Herger talks about a case where we have got 10 years of studies to determine something—maybe long-term—oh, that some of those ideas will work. And you heard testimony earlier today about people advocating doing that and saying that they thought it was a good idea.

But having said that, I do think that this legislation is necessary. I think that a change in the law in order to accomplish some of these things is necessary. We may not be able to agree on that.

Mr. GARAMENDI. Well, it is not a matter of agreement. It is a matter of the facts as they are being developed in California today.

The Bay-Delta Program will this summer be moving forward with its environmental impact statement, both for the State and the Federal Government. That study will authorize the construction of these kinds of projects.

It is feasible today under the current laws, including the Endangered Species Act, to take immediate action now, this day, and in the days in the immediate future to initiate and to construct the kind of projects that allow levees to be set back and the river to have room; specifically, in your own district, sir.

The lower San Joaquin—we are working on projects in that area today that would allow the levees to be set back, would increase the flood capacity substantially, not by several magnitudes, and at the same time create habitat, reducing the endangered species issues for the entire area because the habitat is provided within the river zone itself. That is going on in the lower San Joaquin, Stanislaus, San Joaquin County, and in the counties to the south.

We are in the process. It is not going to be a multiyear. If we get the appropriation that the President has asked for, we will be moving forward immediately within the current year and on into '98 and '99. So, you know, the issue is before this Congress. It is this Congress's opportunity to move forward on the flood protection that I have just described.

Mr. POMBO. Well, I appreciate the gentleman's comments. I am quite well aware of the activities that are going on in my district, and it is—I won't go there. I want to thank the panel for their testimony. I, again, want to apologize to this panel for the delay in getting you up here, but I do appreciate a great deal your testimony and your traveling here—those of you that did.

And, again, there may be questions that will be submitted by members who were not able to ask those questions. If you could answer those in a timely manner, it would be greatly appreciated. Thank you very much. Oh, I thank the people in Sacramento that helped set this up as well. Thank you.

[Whereupon, at 3:50 p.m., the Committee was adjourned; and the following was submitted for the record:]

I

105TH CONGRESS
1ST SESSION

H. R. 478

To amend the Endangered Species Act of 1973 to improve the ability of individuals and local, State, and Federal agencies to comply with that Act in building, operating, maintaining, or repairing flood control projects, facilities, or structures.

IN THE HOUSE OF REPRESENTATIVES

JANUARY 21, 1997

Mr. HERGER (for himself and Mr. POMBO) introduced the following bill; which was referred to the Committee on Resources

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A BILL

To amend the Endangered Species Act of 1973 to improve the ability of individuals and local, State, and Federal agencies to comply with that Act in building, operating, maintaining, or repairing flood control projects, facilities, or structures.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Flood Prevention and Family Protection Act of 1997".

SEC. 2. PURPOSE.

The purpose of this Act is to improve the ability of individuals and local, State, and Federal agencies to comply with the Endangered Species Act of 1973 in building, operating, maintaining, or repairing flood control projects, facilities, or structures to address imminent threats to public health or safety or catastrophic natural events or to comply with Federal, State, or local public health or safety requirements.

SEC. 3. AMENDMENTS TO ENDANGERED SPECIES ACT OF 1973.

(a) ACTIONS EXEMPT FROM CONSULTATION AND CONFERENCING.—Section 7(a) of the Endangered Species Act of 1973 (16 U.S.C. 1536(a)) is amended by adding at the end the following new paragraph:

"(5) Consultation and conferencing under paragraphs (2) and (4) is not required for any agency action that—

"(A) consists of building, operating, maintaining, or repairing a Federal or non-Federal flood control project, facility, or structure—

"(i) to address a critical, imminent threat to public health or safety;

"(ii) to address a catastrophic natural event; or

"(iii) to comply with Federal, State, or local public health or safety requirements; or

"(B) consists of routine operation, maintenance, rehabilitation, repair, or replacement of a Federal or non-Federal flood control project, facility, or structure, including operation of a project or a facility in accordance with a previously issued Federal license, permit, or other authorization.".

(b) PERMITTING TAKINGS.—Section 9(a) of such Act (16 U.S.C. 1538(a)) is amended by adding at the end the following new paragraph:

"(3) For purposes of this subsection, an activity of a Federal or non-Federal person is not a taking of a species if the activity—

"(A) consists of building, operating, maintaining, or repairing a Federal or non-Federal flood control project, facility, or structure—

"(i) to address a critical, imminent threat to public health or safety;

"(ii) to address a catastrophic natural event; or

"(iii) to comply with Federal, State, or local public health or safety requirements; or

"(B) consists of routine operation, maintenance, rehabilitation, repair, or replacement of a Federal or non-Federal flood control project, facility, or structure, including operation of a project or a facility in accordance with a previously issued Federal license, permit, or other authorization.".

○

7 April 97

To
United States House of Representatives
The Committee on Resources
Committee Room 1324 Longworth HOB, Washington, D.C.
Honorable Don Young, Chairman

Oversight Hearing on the Implementation of the Endangered Species Act
10 April 1997

Statement of Brent Hastey
Member, Yuba County Board of Supervisors
Chairman, Yuba County Water Agency
Flood Victim

Mr. Chairman, Thank you for allowing me this time to come before you today.

Yuba County is in Northern California and is bounded by the Feather and Bear Rivers and bisected by the Yuba River. Historically the area has been subject to massive flood flows about every 10 years. Since the 1860s there has been a continuous effort to provide and improve flood protection for the area. The early efforts were to build levees and provide flood channel capacity to safely pass flood flows. Later efforts included flood storage reservoirs and the current efforts are primarily to maintain and restore existing levees and floodways.

Although the levee and floodway systems are man made tools to protect the resources of the area, over zealous governmental regulators have lost sight of their intended purpose and have dictated that their primary purpose be wildlife habitat. This often has delayed, increased the cost, restricted and in some cases stopped needed maintenance activities.

The Yuba River since the early 1860s has been impacted by upstream hydraulic mining debris. Although the California Debris Commission was created by Congress to deal with the problem and major efforts were made, the continued downstream movement of this mining debris reduces the lower river channel capacity. Until about 10 years ago local aggregate companies each summer harvested sand and gravel from the accumulated river bars. Regulatory agencies either prohibited, or made the process so cumbersome that this practice has stopped and the channel capacity continuously degrades. It now takes three federal and one state permit to harvest accumulated material from within the floodway. What was previously done at no cost to the federal government will probably now require the expenditure of $3 to $5 million for the government to carry out its obligations under the Federal California Debris Commission Act just to correct the loss of channel capacity from the January 97 flood.

The routine levee maintenance in California is generally carried out by locally funded Levee or Reclamation Districts with limited staff and resources. A number of the districts only have part time staff and do not even have an office. Obtaining permits and complying with environmental regulations becomes a major and sometimes overwhelming task for these local districts, taking scarce resources that would otherwise have gone to provide essential maintenance to levees and floodways.

Since 1988 there has been a major effort to restore the existing levee system to the level of protection the levees were constructed to provide. This work is not new construction or betterment, but simply major maintenance to existing levees. The environmental assessment for this work identified 43 clumps of elderberry bushes, made up of 1538 stems, that would be disturbed by the levee restoration work. The elderberry bush is habitat for the endangered Valley Longhorn Elderberry Beetle. The required mitigation before any of the identified maintenance work could be undertaken was to create a 76 acre, $1.9 million mitigation site. The January 97 floods caused damage to the mitigation site, requiring $0.4 million to repair. This brings to date $2.3million for mitigation of 43 clumps of elderberries, or $55,800 per clump, or $1495 per elderberry stem.

The assessment also included 7 acres of emergent marsh. This was due to the fact that when high water is against the levees some of it seeps through the levee. In fish and wildlife's estimation this seepage creates wetlands that need to be mitigated. Taking this logic to its fullest, one must assume that the 27 square miles of Yuba County that went underwater will now need to be mitigated. Water seeping through the levee at high water is a failure of the flood control system and should not need to be mitigated.

As a result of the 1997 flood the U.S. Army Corps of Engineers has identified several additional levee sections needing major maintenance and have indicated that this work on existing levees will require the development of an additional 69 acres of mitigation. If the previous cost of $25,000 per acre holds, this will be an additional $1.725 million or a mitigation cost in excess of $4 million to maintain about 29 miles of existing levees. The mitigation cost to maintain 29 miles of existing man made flood control levees will be approximately $138,000 per mile.

We frequently hear from the resource and regulatory agencies that the ESA does not need reformed, that its problems can be corrected administratively. We have not found this to be true. As an example, the January 1997 California floods resulted in three levee breaks in Yuba County and one in adjacent Sutter County. Secretary of Interior Babbitt suspended the requirements of ESA so the levee breaks could be expediently restored to prevent further flooding. The resource agencies agreed that the water flowing through the levees could be stopped with minimal consultation, however, before full repair of the levee break was made the full consultation process would have to take place. The resource agencies said that mitigation for the substantial habitat loss was not necessary for the levee break, but the impacts from repairing the levee break had to be fully mitigated. Due to concern over this issue, at the 5 March 97 Energy and Water Appropriation hearing Congressman Fazio asked Secretary of Interior Babbitt the following:

FAZIO - We still have mitigation requirements, I am told, even if we wave the short-term requirement for ESA in a flood fighting environment; is that correct? Or are there no further mitigation requirements that might cause an agency to be somewhat reticent?
BABBITT - I think we are now clear that if it is about the emergency repair of existing levees to get through this flood season, the answer is to go out and repair them, period.
FAZIO - And don't worry about having someone come and post a notice on your door next spring that, by the way, you have got to mitigate what you did last winter when you were fighting floods?
BABBITT - No, they don't even have to call us. All they do is go out and repair the levee.

In spite of these assurances form the Secretary of Interior, as part of repairing the three levee breaks in Yuba County and one levee break in Sutter County, it is being required that an additional eight acres of mitigation site, at an estimated cost of $200,000, be provided for closing the levee breaks!

Although the Administration continues to give assurances that the ESA works and any problems can be corrected administratively, the end results show otherwise. The policies of the multitude of governmental agencies implementing the ESA are diverse and independent of each other. Without amendments to the ESA, we see little hope for it ever being reasonably implemented. As an example it does not seem justified to require mitigation at a 5 to 1 ratio for maintaining an existing man made levee that protects not only human life and private and public property, but extensive amounts of wildlife habitat; nor does it seem justified to be required to mitigate for fully closing the hole in a broken levee that cost the lives of three people, the displacement of 40,000 people, the loss of many hundreds of homes and several hundred million dollars of damage to public and farm facilities. We urge your passage of this bill.

Thank you for you time today to speak with you. I will be available for questions at your convenience.

DANTE JOHN NOMELLINI
MANAGER AND CO-COUNSEL
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POSITION PAPER

January 1997 San Joaquin River Flooding, Levees, Habitat, Endangered Species Act and HR 478

The January 1997 floods along the Lower San Joaquin River have like most floods raised a large number of issues and questions. The typical question presented is quite simple. Why did the levee break and who is at fault? The question which we believe is most relevant is what can be done to reduce the risk of future flooding?

Flood control in general and levee construction and maintenance in particular involve risks. There are no fail proof flood control systems or levees. Prediction of future climatic conditions, earthquakes and other natural occurrences are based on the recorded or experienced incidents of the relatively recent historical period and are in reality a justified speculation. Predictions of future regulatory constraints, land use planning decisions and financial impediments have proven to be even more speculative. Most of the levees in the Lower San Joaquin River area were designed and constructed many years ago based on numerous assumptions which although reasonable at the time are no longer valid. Land use changes and the tremendous damage associated with flooding has also changed our attitudes with regard to the desired degree of flood protection. "50 year" protection for agricultural areas and "100 year" protection for urban areas is no longer viewed as sufficient. The general consensus appears to be that the present level of flood protection is not adequate.

Many of the suggested alternatives for improving flood protection such as levee setbacks, flood bypasses, flood retention basins, dams and flood control channels will be costly and will take many years to implement.

Among the "non-structural" alternatives which could provide an immediate increase in flood protection is the reduction of regulatory constraints on maintenance and incidental improvement of the existing levees and flood control channels.

While we are supportive of protection of our rivers and bays and the fish and wildlife therein, we believe it is unwise to require that vegetative habitat be maintained and propagated on levees and in flood channels which were not designed or built to accommodate such habitat.

In our view, the critical portions of a levee are 1) its structural cross-section consisting of the mass of earth and stone necessary to hold back the forces exerted by the water and to stop the flow of water over or through the levee; 2) the levee crown which is essential for access for inspection, emergency response and repair, and 3) the waterside and landside slopes on which the recurring floodfight and repairs must be conducted to protect and maintain the structural cross-section and levee crown. These critical portions of a levee should essentially be free of brush, shrubs, vines and trees. Such vegetation obstructs inspection or so greatly adds to the cost that adequate inspection is practically impossible. More importantly, such vegetation obstructs the placement of floodfight materials such as tarps, plastic and sandbags and must be removed at the time of the emergency floodfight. The portion above the waterline can usually be removed but consumes time and manpower when both are critically limited. The vegetation under the water is extremely difficult to remove and practically speaking simply precludes the placement of tarps and plastic below the water level.

Some trees and bushes have roots which penetrate the structural cross-section of the levee, thereby creating a path for rodent burrows and/or the passage of water. If such a tree or bush dies, the roots rot and a hole is left within the levee. Large trees and bushes can topple over during storms and floods, thereby resulting in large cavities within the critical portion of the levee. Trees and bushes harbor burrowing rodents such as beaver, muskrat and squirrels and some constitute a food source for such animals.

Trees and bushes in the flood channels obstruct the free flow of flood waters, thereby raising the upstream flood stage. Detrimental changes in the velocity and direction of currents could also result.

The problem is not static. Trees and bushes get larger each year, the roots extend and new plants are propagated. The additional flood risk associated with such vegetation on the levee and in the flood channels is increasing with time.

The authorization to remove such vegetation during an emergency does not eliminate the risk. As explained above, it takes time to remove the vegetation and the vegetation under the water cannot practically be removed. Additionally, the emergency work takes place only on limited portions of the various levee systems, thereby leaving large amounts of the detrimental vegetation undisturbed.

There are a number of State and Federal laws which have in recent years been used to limit or prohibit the control and removal of damaging vegetation on levees. The Federal Endangered Species Act is one of such laws. In our view, the Federal Endangered Species Act has been rigidly applied to levees and flood control channels in an unreasonable manner. The levees when originally constructed were without vegetation of any kind. They were designed and built to provide flood control, not habitat.

It was clear from the start that constant maintenance would be required and that vegetation would have to be regularly controlled and removed. Plants including those such as elderberry bushes started growing on the constructed mounds of earth constituting the levees and most likely would not exist were it not for the levee. If the levee breaks in the vicinity, the elderberry bush will likely be washed away and destroyed. Even those elderberry bushes not on the levee but in the area of flooding could be destroyed. In the San Joaquin River area, there are large numbers of elderberry bushes and their general protection as habitat for a limited number of endangered elderberry beatles is viewed by many as an abuse of the Endangered Species Act. Another example of Endangered Species Act concern is the prohibition of dredging and placement of fill for levee maintenance and the creation of shaded riverine aquatic or emergent marsh habitat in areas designated as critical habitat for Delta smelt. It would appear that it will be a very long time before there will ever be enough data on smelt distribution or habitat utilization to conclusively support or deny projects.

The critical importance of maintaining the existing levees is not debated yet such maintenance is being obstructed. Once constructed, a levee system must be maintained. In most cases, maintenance is a legal mandate for a governmental entity. The failure to maintain could in all cases lead to litigation and liability for damages. The "after the fact" application of constraints on maintenance of existing facilities is grossly unfair.

All operations relating to levees and flood control channels are constrained financially. Many local agencies are dependent upon assessments of only agricultural lands or impoverished developed areas where the ability to pay is quite limited. All local agencies in California are legally limited from increasing assessments without "voter approval". State and Federal agencies are also severely constrained due to budgetary limits and the condition of the economy. Even emergency response is financially constrained. State and Federal Disaster assistance is becoming more and more limited and subject to ever-increasing conditions.

The money spent on habitat assessments, consultations, pruning vegetation, more difficult inspection, mitigation and emergency removal is money which should go towards reducing the flood risk. Emergency removal is usually with hand labor and at times when weather conditions are poor, thereby resulting in costs much higher than would be required if removal or control was part of routine maintenance. Aside from the negatives for flood control, there is also a negative on the environmental side in that the investment of regulatory costs is in the protection of habitat which must be periodically destroyed.

It does not make good sense to have our limited environmental dollars working against our limited flood control dollars. The primary purpose of levees and flood control channels should be flood control. The habitat should be protected and enhanced in areas off of the critical levee areas and in those areas of the channels where the flood flows are not detrimentally altered.

This does not mean that there will be no habitat along our levees and flood channels. In our area the levees and channels are not uniform. There are substantial areas where there are waterside berms, channel islands and enlarged channels where habitat can be maintained and enhanced without increasing the flood risk. There are also opportunities to create additional waterside berm areas to support additional habitat.

We support the passage of HR 478 as an important step in correcting an unreasonable and unjustified conflict between habitat protection and flood control.

We also support removing the regulatory threat on private landowners to encourage voluntary preservation and propagation of off-levee habitat and believe the "safe harbor" approach is a step in the right direction.

If critical habitat is not sufficiently available by way of the less onerous approaches, then public dollars should be used to acquire and propagate such habitat in areas where there is no conflict with other critically important public interests.

Approved by Directors March 11, 1997.

Dated: 3-13-97

DANTE JOHN NOMELLINI
Manager and Co-Counsel

Testimony of Norman Yenni, Sears Point Farming Co.

Submitted to :
The US House of Representatives
Committee on Resources,
Washington, D.C.
April 10, 1997

My name is Norm Yenni. I am a fourth generation farmer in Sonoma County, CA. My brother and I farm dryland hay and grain on 2300 acres of diked baylands along the north shore of San Pablo Bay, which is the northern portion of San Francisco Bay. This land was leveed off and drained in the late 1870's and has been in crops or pasture ever since. There are another 12-14,000 acres in the Petaluma River and Sonoma Creek deltas similar to ours, used in agriculture. Wildlife on our land has peacefully coexisted with the faming practices for generations. A recent Audobon Society study listed over 200 species of birds present on our ranch. That's in addition to rabbits, skunks, raccoons, mice, snakes...and on and on. In the past few years, I've noticed a growing deer population, something formerly rare to this type of land.

Since this is tideland, ongoing maintenance of our levees is essential to protect the land from high tides and stormwater runoff. The work is slow and costly, but also necessary.

Poor maintenance of levees can result in seepage, overtopping, and even levee breaches. This translates into lost crops, delayed planting, damaged equipment, drastically reduced habitat for wildlife, and could even take human life. Saltwater intrusion can cause crop damage years after the flooding event. That's not to mention the weeks or months of pumping to remove the water.

Prior to 1980 no one was very concerned about farmers maintaining their own property at their own expense. Sometime in the early 80's the US Army Corps of Engineers notified our Soil Conservation Service (SCS) that a Section 404 Permit should be obtained for our levee work. In October 1984 the Corps of Engineers issued a five-year general permit to the landowners for both levee and ditch maintenance. The SCS acted as our clearinghouse. The permit fee was minimal, and there were two common sense practices stipulated to avoid damage to endangered species. That was not a problem. Nobody got too excited... that was the good ole days.

In May of 1990, the SCS applied for a renewal. A one-year extension was granted, but the permit was returned for more detailed information. In 1991, another one-year extension was granted and the permit was once again returned for even more detail.

After three years of extensions and reapplications, the Corps denied further extensions, and the landowners felt they were being played with. After three and one-half years we were still basically at ground zero. In October, 1993, Congresswoman Lynn Woolsey assigned her aide, Grant Davis to expedite the permit process. The US EPA also assigned a staff person to coordinate activities.

From this point on, the key sticking point in our negotiations was the Endangered Species Act (ESA). Specifically, the salt marsh harvest mouse and the clapper rail (a bird) are both considered as endangered. This mouse hasn't been studied, or even seen in this area, we just have the type of habitat they prefer. Regardless, the US Fish and Wildlife Service (FWS) declared that we must mitigate for the "permanent and temporary loss" of 71 acres of species habitat, the borrow areas (where mud is excavated) adjacent to the levees.

Their suggestion was that we avoid the mitigation entirely by either 1) importing soil from an outside source, or 2) using topsoil from our fields. Importing soil of any kind in the quantities we need would be an outrageous cost. Topsoil would be cheaper to use, but it's not the best quality material. What works best is the sticky clay mud that forms at the bottom and sides of sloughs. You know, the kind that dries in the soles of your shoes and you have to get it out with a screwdriver. Neither of the FWS suggested options were workable.

As landowners, we contend that the borrow areas are the same as they were 120 years ago. Siltation heals and restores the borrow area long before the need to excavate more materials, and the levees have not been moved. Thus, any habitat taken by our work was done years ago and the impaired habitat has been a static figure. What we're talking about could be termed "retroactive mitigation", 100 years retroactive.

Collectively, the farmers of this area provide hundreds of acres of non farmed wetland habitat in the form of ditchbanks and lowlands not profitable to farm. Numerous species use our cropland for food and shelter. A FWS biological opinion acknowledges that our ongoing practice of digging of borrow ditches creates or enhances tidal flow which is essential to the health of a salt marsh and "could benefit clapper rails and salt marsh harvest mouse in several ways." In many places, borrow ditches are the only channel for tidal flow. They also reduce mosquito populations by draining ponded areas. Our levees and farmlands serve as highwater refuge to those species living in the berm areas. None of this negated the FWS demand for mitigation.

As dryland hay farmers, we are not in the most profitable sector of agriculture. Already the permit fees had amounted to $9,800 which comes down to less than $300 apiece for the participating landowners, that's not too bad. But, the mitigation, which is still in progress today, is to the tune of half a million. Since many landowners have smaller parcels than mine, that figure should be adjusted per foot of levee covered. My bill would have been $50,000 to $100,000. All this so we can spend our own money to protect our property. It's enough to push some to financial ruin. The landowners rejected the proposal outright.

Fortunately, (and I'm not sure that's the right word) our congressional aide and EPA were working behind the scenes to calm the growing unrest among landowners. They convinced FWS, California Dept. of Fish and Game, and several other public and private groups to pool their resources already planned for wetland enhancement, and credit this restoration to our levee permit mitigation. This is the plan that we finally settled on. Five years and a few weeks from the original application, our permit for levee work was issued. Interior ditch maintenance, included in the first permit, was excluded. An application is on file as of this writing.

But as for myself and my neighbors, this settlement came too late. During the last two years of negotiations, we couldn't do any levee maintenance. We experienced serious floding in 1995, most of which could have been avoided. Water coming over the top of our levees flooded 1600 of our 2300 acres, destroying what crop was planted and delaying further planting until late in the season. If we had been allowed to do the type of maintenance which we practiced for the last 100-plus years, much of this flooding never would have happened. If we had legislation such as

H.R. 478, this flooding could have been avoided. Levee maintenance must be done on a timely basis. We can't engage in endless negotiation and mitigation to protect a phantom species.

Ironically, a major portion of the funding came from the Shell Oil Spill Litigation Fund. Their environmental disaster came to our advantage. It's too bad we had to rely on their environmental damage to keep our land safe. Fate works in strange ways.

In all fairness, I need to acknowledge that several government people really went out of their way to make this permit happen, putting in hours of overtime and suffering verbal abuse. Without their help, I don't know if we would have a permit even today.

But what we ended up with can set a dangerous precedent. The agencies will claim that mitigation was done. The landowners claim that mitigation was never justified and we didn't provide any. The battle is over for now. Both sides have to eat crow.

This is not how the regulatory process is supposed to work. We shouldn't have to mitigate for a phantom mouse, we shouldn't need congressional help to get a maintenance permit, and the process sure shouldn't take five years. There was little or no agency consideration given to the beneficial aspects of our practices, the wildlife we harbor in our everyday activities, or the consequenses of a denied permit. I remember asking someone from the Corps (I think) about showing some credit to us for the tidal restoration, and his reply was "Well, that's not what you're trying to do".

In the last ten years, the Corps of Engineers has turned from a distant agency that only gets involved in big projects, like dredging the bay, into one that we have to deal with and consider in our everyday operations. While they weren't the major obstacle in the levee issue, they have emerged as key players in anything looking even remotely like a wetland.

The landowners' ill feelings for certain agencies are alive and well today. Unfortunately, there is a trend to lump all governmantal agencies together, which creates an unhealthy situation for all. There are currently no less than six groups, at various levels, working on a plan to preserve the baylands, mainly the privately owned baylands. They are all concerned with preserving this valuable endangered species habitat. It is impossible to keep up with these groups and still run a farm. If we don't keep up with them, we fear the loss of our property rights.

Regarding the Endangered Species Act itself, I think most farmers support the original intentions of the act. As farmers, we need an environment suitable to grow our crops and safe for ourselves to work in. Farmers are likely to be the first to see environmental damage, be it from crops that won't grow, increasing floods, or melonomas on our skin, so, of course, we're concerned.

What I object to is the exploitation of the law. It's common talk in our area that the government - at some level and in the forseeable future, wants to own all the historic baylands. Every government agency denies it. Every landowner agrees with it.

Endangered species, as well as wetland regulations are two of the main tools being used in this effort. Our farms are deemed as potential prime habitat. If that's the case, and our land is such valuable habitat, I don't understand why the appraisals are so low. To stay in agriculture, the "Shoot, shovel, and shut-up" approach emerges as the landowner's best plan of action. Clearly, this is not what the act intended.

Farmers have been stewards of the soil since the beginning of time. The claim could easily be made that the endangered species on private property today are there because of our practices, and eliminating those practices could further endanger them. I'd propose that if endangered species were found on my property, it should not be an encumbrance, but a benefit. Like, "Hey, I've got something rare and valuable!" You just might find hundreds of people looking at ways to propagate the species. That's what farmers do every day with domestic species.

Another suggestion is to require agencies with lands for restoration to implement their plans. There are probably 15,000 acres in the North Bay owned by agencies and awaiting restoration. 74 of those acres are within my levee system. My landlord and I have had to maintain their levee, pump off their water, and for 20 years, no benefit to us has been derived from it. There should be more effort put into restoration of current holdings and less into acquisition ofnew lands. More is not always better.

Incidental take is a fact of life with nature. For example, while helping an engineer from our Resource Conservation District (formerly SCS) survey the mitigation site, he inadvertently stepped on a mouse in the tall grass. The only reason we knew was that we heard a squealing coming from the ground under his foot, which stopped when he moved. By the letter of this law, if that were an endangered mouse, that man should be behind bars today. Even if the mouse didn't die, it was harassed, which constitutes a taking. By the way, I have a witness to this.

I think there needs to be a look at the economic and societal costs. Tens and even hundreds of thousands of dollars have been spent protecting individuals of and endangered species, only to find they die of other causes than we suspect. Extinction is the final step in the evolution of a species. We have no right to hasten extinction, but I defy anyone to stop evolution.

The public has the right to expect meaningful results from ESA enforcement efforts. For all the efforts, all the money spent, and all the conflict generated, I believe the results of the Endangered Species Act have been disappointing at best.

A lot of what we do as farmers relies on common sense. Federal regulations should be based on common sense as well. I believe the American public feels the same way. If the public could speak out on the subject, I think they would agree that the American farmer is the best person to protect endangered species, and I know that they would agree that we must maintain our levees without delay and without added costs. Passage of H.R. 478 will help to put some common sense back and credability back into the Endangered Species Act.

Thank you for your consideration of my comments.

Norman Yenni
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Testimony before the House Committee on Resources Hearing on the Implementation of the Endangered Species Act

I wish to thank the members of the Committee on Resources for providing me the opportunity to present my views on the relationship between the Endangered Species Act, the Flood Prevention and Family Protection Act of 1997 (H.R 478), and the recent flooding in California. At the outset, it is important to note that I am not an expert on the administration of the ESA, nor will I offer any testimony regarding its merits. Instead, I come before the committee as a geologist and member of the academic community at the University of California, Davis involved in the study of watersheds and their floods. It is my opinion that current attempts to assign blame for the floods of 1997 to environmental laws and regulations that govern levee maintenance and repair has the unwanted effect of diverting attention from the systemic causes of regional flooding and obscures the significant lessons learned. Since my time is short, I have expanded my views in an extended letter to the Committee attached to my written testimony. In addition, some of these views are reviewed in my recent book entitled "California Rivers and Streams: the Conflict between Fluvial Process and Land Use", which has also been made available to the Committee.

The floods of 1997 revealed both strengths and weaknesses in the way that local, state and federal agencies manage floods. However, before beginning a program of new levee or dam construction and crafting or rewriting laws, it is crucial that the lessons learned from these floods be evaluated. I believe that at least four key lessons were learned. First, despite 100 years of effort, we cannot prevent flooding of the floodplain. No amount of levees and dams can eliminate flooding, yet a substantial majority of planners, developers, and floodplain dwellers appear to believe otherwise. Indeed, the title of H.R. 478, the Flood *Prevention* and Family Protection Act, mirrors this. Second, California's multipurpose dams fulfill one primary purpose: water supply. The design and operation of these dams insures their limited effectiveness in large storm events. Third, levees not only fail to prevent large floods, but exacerbate the damage caused by flooding. This stems from the fact that levees, which ultimately work against a river rather than with it, are the source of their own undoing. Finally, flood control in the Central Valley has inadvertently increased the potential for flood damage by locking us in to a cycle of "serial engineering." By reducing small and intermediate floods, our dams and levees lull us into a false sense of security. This, in turn, stimulates urbanization directly in harm's way. When flooding predictably occurs, there is an immediate call for more flood control structures and new laws that have only local or cosmetic effect. Ultimately, these laws and structures do not prevent large-scale flooding, but they do stimulate additional development of the floodplain, ensuring an ever-escalating cycle of flood engineering and flood damages.

It is my belief that unless we break the cycle of serial engineering of our rivers, the nation's floodplain dwellers will see a continued increase in flood damages and associated human suffering. The key is to resist the institutional and cultural tradition of building more and larger levees and dams following each flood, and to avoid crafting new laws that have only local or cosmetic effects. The most important step that the Committee can take is to bolster mechanisms that compel development to stay out of harm's way, and to promote the use of alternatives to traditional floodplain engineering and planning. This course of action may be more difficult than simply authorizing new dams and levees, or blaming and altering existing environmental laws and regulations, but in the long run, it will be the most effective.

Jeffrey Mount
Professor and Chair, Department of Geology
Member: John Muir Institute for the Environment

The Cycle of Serial Engineering in Flood Management, Central Valley, California

Dr. Jeffrey Mount
Department of Geology and the
John Muir Institute for the Environment
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Submitted to the House Committee on Resources hearing on Implementation of the Endangered Species Act

INTRODUCTION

The New Year's Floods of 1997 in the Central Valley of California illustrate numerous weakness within state and federal approaches to flood management. These weaknesses are not limited to the current labyrinth of dams and levees, but include our approach to land use planning and our attempts to engineer rivers. My testimony before Congress focuses on the inherent failures of California's approaches to flood management. The key lesson *re*-learned from these floods is that we cannot prevent all flooding of the floodplain. In addition, our traditional response to flooding, which includes seeking to assign blame, creating or modifying laws with only cosmetic effect, and erecting more and larger levees or dams, locks us into a cycle of "serial engineering" that ensures that future flooding disasters will be even more costly.

Since the 1993 floods on the upper Mississippi River Basin, there has been a national call for reform. The floods of 1997 present an opportunity to revisit these recommended reforms and to implement them. This testimony cautions that regional-scale flooding has little to do with legislation like the Endangered Species Act, but instead reflects a failure of our traditional approaches to flood control. Given the national attention to flood issues, it is appropriate to consider turning the flood control paradigm on its head: the solution to flooding disasters is not more flood control, but an integrated, watershedwide program of flood *promotion*, and an institutional willingness to get out, and stay out, of harm's way. Rewriting environmental laws is unlikely to have any significant effect, and obscures the real issues affecting floodplain management.

LESSONS LEARNED

We cannot prevent flooding. California boasts of almost 6,000 miles of levees and more than 1400 dams. With this elaborate infrastructure we currently capture, control and consume more than two thirds of the water that runs off of the surface of the state. This highly managed system was not, and is not, capable of preventing flooding. The hard lesson learned is that despite our seemingly Herculean engineering efforts, floods are going to happen, and if you live on a floodplain, you are going to eventually be flooded. Although this seems like an overstatement of the obvious, a recent Field Poll showed that 7 out of 10 Californians believe that our state's planner and engineers have somehow taken care of flooding problems and their regions are not at risk.

Most "multipurpose" dams fulfill only one purpose. At the start of the storms that brought so much flooding to the Central Valley, each of the region's large reservoirs had a certain amount of space set aside to absorb runoff and prevent flooding. With the exception of Folsom Reservoir on the American River, this space was rapidly overwhelmed by the intense rain and snowmelt that hit the region. The reason that this occurred is simple; when it comes to water supply versus flood control, the "multipurpose" title of most reservoirs is a ruse.

At Oroville Dam on the Feather River and New Melones Dam on the Stanislaus, operators set aside less than 20% of the volume of the reservoir to absorb a flood. At New Don Pedro Dam on the Tuolumne River, a token 15% of the reservoir storage is dedicated to flood control. It should be no surprise that an uncontrolled spill occurred at New Don Pedro Dam, leading to significant downstream flooding.

The very limited flood storage is only half of the story. It would be logical to presume that the dam operators would let water out in anticipation of the large storm. After all, northern Californian's heard dire predictions for this storm as much as a week in advance of its arrival. Regrettably, various design constraints on these dams and the channel systems that lie immediately downstream prevent the rapid lowering of the reservoir. Many of these dams simply cannot let out water rapidly until they are very nearly full. By then it is, and was, too late.

There is a bright spot in the operations of the state's reservoirs. In response to the floods of 1986, the operating procedures at Folsom Dam, along the American River immediately upstream of the Sacramento Metropolitan area, were substantially revised. Flood control reservation at Folsom Reservoir is 40%. Moreover, in anticipation of the large storm, the dam operators started releasing water a week in advance. Although the volume of the 3-day runoff was the highest ever recorded on the American River, the flood was handled without major concerns and the flood control reservation was restored within a week of the storm.

It is a hard lesson to admit, but when it comes to water supply and flood control, most "multipurpose" dams of the Central Valley fulfill only one purpose.

Levees Fail. We are addicted to levees as the first and foremost line of defense against floods. The "leveefication" of the state's rivers began shortly after the gold rush and continued for much of the next 100 years, spurred on by the ready infusion of support from government agencies. Today, we are coping with the results of the unanticipated fallout from this ambitious over-engineering program. The floods of 1997 taught us that levees placed adjacent to river channels are doomed to eventual failure, both figuratively and literally. This failure stems from the fact that levees, by virtue of their hydrologic impacts and engineering constraints, are the source of their own undoing.

The hydrologic analyses that took place following the floods of 1993 in the Mississippi reinforced what had been known for some time: levees increase the elevation of floods. By divorcing rivers from their floodplains, levees eliminate flood storage on the valley floor, concentrating the flow into a narrow channel. This causes rapid rises in flood stage and, when coupled with levee failures and over-topping, leads to catastrophic flooding. In addition, by creating bottlenecks within flood systems, levees tend to exacerbate upstream and downstream flooding, leading to the inevitable call for more levees.

Of California's 6,000 miles of levees, approximately 20% are engineered to federal standards. Most of the flooding that occurred during the floods of 1997 was associated with structural failure of levees that were simply unable to withstand high flows for long periods. However, it's important to note that several spectacular failures occurred on engineered levees, including one that had been well-maintained, checked and recently certified. This is one of the most worrisome aspects of levees. No matter how rigorous the engineering, design constraints dictate that even the best levees will fail.

The predictable failure of levees also stems from the manner in which they are applied. Levees, more than any other flood engineering effort, fail because they usually conflict with, rather than conform to, natural river processes.

The size and geometry of an unregulated river channel, along with the rate and manner in which it migrates across its floodplain, reflects a least-work design that most effectively handles the sediment and discharge supplied by its watershed. Because rivers are in a state of constant change, which is an essential aspect of the way they handle sediment and discharge, this least-work design can be considered a state of "dynamic equilibrium."

Levees disrupt this equilibrium in two key ways. First, by placing levees against rivers, we are effectively asking one of the world's most changeable and dynamic physical systems to hold still. The result is that during large floods rivers will undercut, erode, and tear down their levees as they attempt to migrate across their floodplains. Second, the close placement of levees alters the fundamental hydraulic conditions of a river. In response, a river will attempt to establish a new form that reflects this change in conditions. In virtually all cases, this new form is in sharp contrast with the form imposed upon it by the levee system. This contest of forms will eventually be won by the river.

Although levees fail, it is important that this committee recognize that failures can be viewed as a mixed blessing. During the floods on the Mississippi it was repeatedly shown that one person's misery is another's salvation. For every levee that failed, innumerable other levees were spared. This occurred because levee failure took pressure off of the overall system as the river was reunited with its floodplain. It is widely recognized that the more than 1000 levee breaks in the upper Mississippi River basin may have saved St. Louis from catastrophic flooding. It is also arguable that levee failures within the Central Valley, most notably along the San Joaquin River, may have averted a calamity in the relatively fragile Delta system, and almost certainly prevented catastrophic flooding in numerous other areas.

It is a difficult lesson to acknowledge, but more than 100 years of levee construction in the Central Valley has not prevented catastrophic flooding. Indeed, it may have increased it. For this reason, levees that are placed against rivers are an untrustworthy ally in flood control, and no amount of rewriting laws like the ESA is likely to change this fact.

Flood control inadvertently increases flood damage. The term "flood control" implies that we can somehow control and even prevent flooding. As noted above, despite our efforts, it is impossible to prevent flooding of the floodplain. All that can reasonably be accomplished is to reduce the *frequency* of floods. But therein lies the rub.

By controlling the small and intermediate floods with levees, dams and a so-called 100-year floodplain, we have locked ourselves into a **cycle of serial engineering** of our rivers and floodplains. This cycle typically begins with the construction of levees in order to increase use of the floodplain for agriculture. Once established, these levees produce extended periods of tranquillity where once there was frequent nuisance flooding. This tranquillity, in turn, stimulates the initiation and growth of urban centers, virtually within the shadows of the levees. Superimposed on this is the FEMA-inspired 100-year floodplain, which encourages development up to some imaginary line in the sand. This line's accuracy does not, in any way, match the precision with which it is placed. The line represents a statistical best-guess based on a skimpy historical data base and a host of assumptions about the distribution of floods. The most it accomplishes is limiting development that would be inundated by small and intermediate floods. Worse yet, in most regions the levees have been raised to a level to insure that the 100-year floodplain lies just inside the levee tops.

But a river is like a soldier's life: 98% boredom and 2% terror. And, like a soldier, it is during those moments of terror that most of the work gets done. Unfortunately for the urban centers that have been lulled into a sense of false security by their dams, faulty zoning laws, and levees, this "work" involves spreading water, sediment and human misery across the floodplain.

The default response to the inevitable terror on the floodplain comes in two phases. The first involves an immediate demand for action, with a call for newer, larger engineering solutions, including raising or expanding levees, erection of new multipurpose dams, and river channeling and straightening. As shown, the problem with this approach is that it does not end catastrophic flooding and, as we repeatedly learn, it often worsens the overall flood condition. Additionally, there is an unavoidable impulse to attempt to assign blame. This is usually associated with crafting or rewriting laws that do not address the systemic cause of flood problems. However, this usually satisfies the demand that *something* be done.

The second phase involves our remarkable human capacity to forget. General Galloway, the author of the most important call for reform in flood management in the upper Mississippi River basin, noted recently in an interview that our "flood memory half-life" is remarkably short. Within six months, most of us will have forgotten the tragedy of the floods of 1997.

The combination of a short flood memory half-life and our desire to construct some perceived structural or regulatory solution locks us into the serial engineering cycle. Even before we complete our supposed fix, we are back at it, populating the floodplain, expanding urban centers directly in harm's way, and forgetting the tragedy of the recent past. When the floods come again, and the damage is much greater because of our well-intentioned actions, the cycle of serial engineering and forgetfulness begins anew.

TOWARD A NEW FLOODING PARADIGM

In the past, structural "solutions" to flooding were simple: build levees which will be followed eventually by multipurpose dams. Given today's political, economic, and environmental realities, the traditional federally-supported large-scale river engineering approaches are no longer viable. As experts throughout the world are noting, it is time to take a second look. The essence of reform lies in breaking the cycle of serial engineering. Only by getting away from applying measures that work against rivers, and moving toward measures that either work with or minimize resistance to a river, can we effectively reduce flood damages in the future.

Breaking the cycle of serial engineering can be summarized into three steps: 1) Stay out of harm's way; 2) Get out of harm's way; and 3) Do no harm.

Stay Out of Harm's Way. To put it simply, the only reason that flooding is catastrophic is because we choose to get in the way. The most cost-effective solution, when costs are measured both monetarily and in terms of human suffering, is to stop making the bad choices that initiate or perpetuate the cycle of serial engineering.

Thirty years of effort on the part of the federal government to encourage us *not* to place ourselves in harm's way has not worked as well as originally envisioned. Moreover, the current FEMA-supported approach of designating an ill-defined 100-year floodplain exacerbates our bad choices by actually inducing development of the floodplain and concentrating populations at risk. In light of this, it is time to consider scrapping this approach to land use planning.

The list of suggestions for reform of FEMA-based floodplain management are too numerous to review in this testimony. The basis of the reform, however, is to recognize three important concerns. First, it is the geomorphic floodplain that is our best indicator of areas at risk of flooding, not an inaccurate statistical best-guess of flood frequency. Second, floods form a continuum that does not stop at the boundaries of the 100-year floodplain. This arbitrary line in the sand does not separate the flood-safe from the flood-prone. Finally, it is important to acknowledge that local control is part of the problem, not the solution. The need to raise money through development is a compelling drive for making bad choices in the floodplain. Traditional local solutions to flood control, which usually meet some minimum standard, tend to transfer problems elsewhere in the floodplain. Regional floodplain management, which is integrated over a watershed and recognizes progressive changes in a watershed, is a more effective land use planning tool.

Get Out of Harm's Way. The Mississippi River floods ignited the current debate over traditional flood control methods, and generated a call for new, creative solutions. It is anticipated that the floods of 1997 will reinforce this call. A key element of any change will lie in the way FEMA administers disasters. Under guidance from Congress and the Whitehouse, FEMA has begun to shift away from the disaster-relief business toward striking a balance between disaster relief and disaster mitigation/prevention. This Committee should consider supporting these moves.

Proposals for mitigating flooding for those who already reside in the floodplain involve elevation of structures, floodproofing structures, development of ring dikes around urban centers, and strengthening (not raising or expanding) existing urban levees to reduce the likelihood of their failure.

One of the proposals being reviewed is the way we operate our "multipurpose" dams. Increases in the aggregate amount of space allocated for flood storage would have had a major impact on the flooding associated with the floods of 1997. Enlarging flood storage inevitably leads to decreases in available water supply during drought years, although this can be reduced by maintaining flexible operating procedures.

Last on most lists of ways to get out of harm's way is relocation. This expensive approach may well be the only cost-effective way to reduce damages in some communities. It is perhaps the most politically unpalatable, but in the long run, as shown in the Mississippi Basin, this approach can reduce costs and human suffering.

Do no Harm. The most important step in breaking the cycle of serial engineering in California involves abandoning more than a century of floodplain management tradition. Levees placed close to rivers, along with their supportive "multipurpose" dams, exact high economic and environmental costs and should be viewed only as a very last, rather than first resort. In the wake of the floods of 1997, there has been a predictable call for more dams and levees. Answering these calls, will further entrench us in the cycle of serial engineering and further guarantees that future natural disasters will be more costly. Flood promotion, rather than flood prevention, may be the key to flood management.

Throughout the world, there are numerous experiments in non-traditional approaches that enhance flood control. Most of these approaches have one thing in common: they reunite rivers with their historic floodplains. In the Central Valley of California there are a minimum of three methods that can be used to reduce the impact of flooding without doing additional harm to the rivers. These include levee-setbacks, development and expansion of flood bypasses, and installation of "circuit breakers" within the levee system.

Following the Mississippi River floods of 1993, there has been increased demand for the establishment of levee setbacks within the upper Mississippi Basin. This approach has multiple benefits. First, when applied correctly, setbacks increase overall flood storage by allowing rivers access to their floodplains. Second, this additional storage lowers flood stage, reducing the potential for catastrophic flooding associated with levee failures. Third, when large enough, levee setbacks allow rivers room enough to restore their form. The geometry and behavior of the channel are able to adjust to the new local hydrologic conditions, without restrictions from adjoining levees. Fourth, setback levees restore regular flooding to the floodplain. Along with ending the uncontrolled urbanization of the floodplain, this flooding can co-exist with and even support a variety of land uses, including farming, and expansion of wetlands habitat and riparian corridors. This alone may be the best mechanism for preservation of prime agricultural land in the Central Valley and the restoration of ecosystems and water quality key to the success of CALFED and the CVPIA.

It is important to note that, like any floodplain management method, levee setbacks are not a one-size-fits-all solution. Modeling in the Mississippi River Basin has shown that improperly placed or sized setbacks can actually exacerbate flooding by creating dead storage that does not reduce flood peaks. Like all management techniques, levee setbacks have to be part of a program that integrates diverse approaches.

Although conceived more than 100 years ago by the California State Engineer, the Sutter and Yolo Bypass systems on the Sacramento River remain a model for modern flood management techniques. The Bypass, which is both a flood storage and conveyance system, is only used during very high discharge events on the Sacramento River. Weirs allow as much as 4/5 of the flow to drain through the levees of the Sacramento into the Bypass, greatly reducing the peak flood hydrograph and conveying this water around the Sacramento Metropolitan area. The rich soils of the Bypass are farmed annually, and development is, logically, prevented.

The lower San Joaquin River is a narrow, highly leveed reach of river that is separated from its floodplain by relatively fragile levees. The extensive network of farms and limited (so far) urban areas makes this reach ideal for a bypass system. This option is currently under discussion by a host of federal and state agencies. However, the window of opportunity to complete this option is rapidly coming to a close as population pressures continue to grow.

The final solution proposed here is analogous to the circuit breakers that keep a house from burning down. The levee failures that occurred on the Mississippi River and on the rivers of the Central Valley reduced and localized catastrophe within the overall system. Modeling after the floods on the Mississippi showed that overtopping of agricultural levees was one of the most effective ways to reduce the peaks of flood hydrographs. One approach to management of very large flood events is to attempt to control chaos by electing to design failure into a levee system. These "circuit breakers" allow planners to choose where natural disasters are going to have their greatest impact, thereby preserving urban areas or other key regions. In the case of California, this failure saved the Delta, the most vital link in water supply to 2/3 of the state's population.

SUMMARY

The floods of 1997 in California and along the Ohio River have reinforced the key lesson learned from the Mississippi River floods of 1993: traditional approaches to flood management do not prevent flooding. Rather, inherited wisdom, which has locked us in a cycle of serial engineering, pits our engineers against one of nature's most dynamic systems. Despite our flood control efforts, this contest has only increased the overall cost of flooding disasters.

It is a daunting task to arrest the institutional and cultural inertia that compels us to build more dams and levees, and to develop laws that have only local, cosmetic effect. However, the floods of 1997, along with the apparent changes in ideology within key federal and state agencies affords an unusual opportunity to change course. At the time of this hearing, all of the issues discussed in this testimony are currently under discussion at the local, State and Federal level. I urge the Committee members to recognize and support these efforts and to encourage solutions which break the cycle of serial engineering, rather than writing new laws that only entrench it.

Respectfully,

Jeffrey Mount
Professor and Chair
Department of Geology
University of California, Davis

Member: UC Davis Commission on the Environment
UC Davis John Muir Institute for the Environment
UC Systemwide Flood Task Force

For additional discussion see:

Mount, J.F., 1995, *California Rivers and Streams: The Conflict Between Fluvial Process and Land Use.* Berkeley, University of California Press, 359 p.

TESTIMONY BEFORE THE HOUSE OF REPRESENTATIVES

Submitted by Christopher Lee,
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Members of Committee:

INTRODUCTION

1. I speak to your committee today wearing three (3) hats. One is an attorney active in representing Reclamation Districts' and general farm problems. Two as a farmer, engaged in active orchard agriculture. Three, and more importantly as a trustee of Reclamation District 556. This reclamation district was organized almost ninety (90) years ago to maintain the existing levees on Upper Andrus Island. During the past 22 years of living in the Delta my family and I have survived three (3) floods of significance, 1982, 1983, 1986 and 1997. All of these floods were significant in that the levees were breached, overtopped and substantial residential, commercial and farm land was destroyed at the collective cost in excess of $1,000,000,000 dollars in our area of California. I speak to you today as a trustee for Reclamation District 556 located in Walnut Grove, California at no compensation. This district is a 2,300 acre island growing multiple species of pears, cherries, grapes, alfalfa, turf grass, corn, wheat, tomatoes and sugar beets. This island also contains numerous residences of the farmers located on the island.

NATURE OF THE PROBLEM

The subject matter affected by the proposed legislation is in fact levees. These are common construction structures throughout all rivers in the United States. The California levees in the Delta and regions North and South of the Delta began shortly after the gold rush and increased in width and height and have been necessarily enlarged upon since that time. The major levee construction done in the Sacramento Delta occurred from 1880 through 1920. Beginning with the gold rush and continuing up until the enactment of the Endangered Species Act these levees received regular maintenance and reconstruction due to the constant pull or flow of water and the velocity of said water against them.

MAINTENANCE AND DREDGING TO ASSIST MAINTENANCE OF THESE LEVEES HAS BEEN FOR OVER A HUNDRED YEARS CONSIDERED A FACT OF LIFE

Up until the enactment of Endanger Species Act dredging of the

Sacramento River, its tributaries, the Consumnous River, Mokulmne River and San Joaquin Rivers and their tributaries was conducted on a regular basis by Corps of Engineers and reclamation districts. These normal maintenance activities were considered absolutely necessary to (1) maintain the levees for the purpose in which they were constructed; (2) keep the drainage rivers in the Central California Valleys at historical depths to allow flood waters and routine drainage waters to flow unimpeded into San Francisco Bay. Levee maintenance and river dredging were considered routine, not exceptional, not destructive but positive in the protection of the rivers, human lives, property and safety.

With the passage of the Endangered Species Act in 1973 congress listed an additional protective concern and that was species . . ., not a bad idea. Many of us in the farm community have long considered the rush to pave over tens of thousands of acres of land in the name of progress not to be particularly wise. This was especially true when much of the land was prime farming ground not subject to being reproduced.

However, with all good ideas the law of unintended consequences has taken over especially with the publishing of the Federal Register in June 3, 1986, of the rules and regulations implementing the Endangered Species Act. I submit a copy of these regulations as Exhibit "A" to my testimony and urges any of the committee members who does not like a staff member and wishes to punish them to make them read these regulations extensively and be prepared to answer questions on them. Obviously my serious point is these regulations are an invitation to disaster and in fact have greatly impeded what would be normally again a routine process.

CONCEPT AND SCOPE

Our societal laws contain volumes of laws and regulations pertaining to things that are considered vital to public safety and welfare. In major disasters Endangered Species Laws are superseded on a regular basis. As a California example when the Oakland Bay Bridge fell as a result of the 1989 earthquake it was fixed in one (1) month. When the Century Freeway in Los Angeles fell down as a result of the Northridge Earthquake it was fixed in record time. When Folsom Dam broke a flow gate within the last two years which caused the loss of 200,000 acre feet of stored water during the summer period, the gate was fixed immediately. When our Reclamation District levee was threatened with collapse in January of this year on Upper Andrus Island the Corps of Engineers arrived in the nick-of-time, negotiated the contract with our district in five (5) minutes, ordered the rock that afternoon and in three (3) days using a 24 hour a day a construction operation, substantially repaired and eliminated the threat to not only our island but several islands. In other words, despite the Endangered Species Act in extreme emergencies any of these projects that would have normally taken years of study at preliminary construction stage were fixed without the necessity of referring to the Endangered Species Act in any significant way.

THE PROPOSAL BEFORE YOU TO EXEMPT THE FIXING AND MAINTENANCE OF LEVEES FROM THE ENDANGERED SPECIES ACT IS NECESSARY TO MAINTAIN OUR LEVEES

This must be analyzed in the context of comparing the levees in Central and Northern California to levees constructed in Southern California. In the Los Angeles basin water is only against the levees for a short period of time during severe weather. The Corps of Engineers was able to cement the sides of Los Angeles River and create a very strong levee that has withstood the test and ravages of weather since the mid 50's. However the levees in Central and Northern California normally have a great deal water against them which precludes the type of construction initiated and maintained by the Corps in Southern California. This means regular inspections, regular maintenance, placement of rock grading, dredging, strengthening of the levees is a part of necessary maintenance. These repairs are no different than fixing pot-holes on a freeway, or the now common practice in California of retrofitting freeway overpasses for earthquake safety, making sure an airliner is safe prior to its flying or any other safety program that we maintain for the benefit of the general public. Likewise river dredging can be compared to snow removal on public highways. Our rivers need regular dredging to make levees work. During the 1997 flood Senator Feinstein personally observed the terrible effects on the Sacramento River whose bed had raised four (4) feet in ten (10) years. Without dredging the levees will not work!!!

What is abundantly clear is that these levees provide safety for homes, businesses, humans and the endangered species. Without them the Central Valley of California would be flooded a considerable amount of time and you would have to displace approximately 10 to 14 million people. In many areas of the Delta the levees are below sea level, much like in Holland. All of these problems portend and demand regular maintenance.

CAN REGULAR MAINTENANCE BE MAINTAINED WITH THE CONTRADICTIONS OF THE ENDANGERED SPECIES ACT

THE THORNTON LEVEE: A TEXT BOOK EXAMPLE

It has been our experience that the application of the Endangered Species Act to regular levee maintenance and reconstruction the Federal regulations controlling the US Fire & Wildlife Service, California Fish & Game, the Regional Water Quality Control Board, the Corps of Engineers and the State Department of Water Resources that routine, cost effective regular maintenance of the levees and river dredging has become prohibitive and in fact non existent.

In my comments I have attached a July 20, 1994, letter from the Fish & Wildlife Service to the Corps of Engineers containing the Fish & Wildlife

Services demands for the privilege of the Thornton Reclamation District 348 to fix their levee. (Exhibit "B")

In the case of the Thornton levee the existence on the levee of bushes that might have contained the Elder Berry Beetle became the controlling environmental restriction on levee repairs.

Now why did the Thorton have to fix their levee? The answer is clear. The levee failed in 1986 flooding the town of Thornton and flooded the entire farming area of Thornton which adjoins Interstate 5 on both sides. This happened during the same storm which closed Interstate 5 for approximately one (1) month. As most of you know Interstate 5 is the major North/South freeway connecting Canada to Mexico. The letter is, upon analysis, a classic example of why this bill should be passed. The wildlife service was only doing its job under the regulations, by the way. (Exhibit "B")

However we need to ask "when dealing with levees and dealing with public safety, do we really need this?" These 1986 regulations in fact (1) increased costs; and (2) frustrated the project without making the Wildlife service responsible for non-repairs caused by the usual bureaucratic wish lists. The whole problem with this process is that this process is being controlled by the US Fish & Wildlife Service through the Corps of Engineers and the group responsible for maintaining that Thornton levee Reclamation District 348 had no say. The levee repairs to District 348 began as a state grant but the Endangered Species Act caused Federal agencies to become involved. Thus the whole project took eight (8) years from 1988-1996 to complete five in a half (5 1/2) miles of repairs. The repairs should have taken eight (8) months.

To add further insult to injury during this eight (8) year period the Thornton Reclamation District was prevented from doing any levee repairs on the water side of the levee due to environmental restrictions. This incomprehensible environmental restriction was simply bad government.

An example of this crooked thinking would have us invision our local highway department being prevented from fixing the fast lane on our area freeways because of the Elder Berry Beetle.

Critical thinking requires all of us to conclude that fixing levees before they fail and flood is a far more economic and safe approach to this problem.

The environmental restrictions were the tail wagging the dog, hamstringing the reclamation district from repairing the levee. In the case of Thornton levee the Fish & Wildlife Agency only had a regulatory enforcement position in the levee repair process. They were absolved under the law from the effects of their staffs positions. The agency involved in protecting the public and private property, farm, business and homes was forced by the Federal agency to mitigate land, place signs identifying Elder Berry Beetle habitat, make written reports analyzing monitored data, put fences around bushes and "train" on site personnel regarding the presence of Elder Berry Beetle.

What may you ask does this have to do with the levees being used to keep water away from freeways, farms and homes? I suppose we may conclude that environmental species act and its hyper technical and over burdensome regulations has a different set of priorities different from us common folk who depend on levees for our physical existence. Member of this committee, common sense has to enter the equation. Nineteen ninety-seven has taught us that our rivers must be dredged and our levees repaired immediately in the most cost effective way. Federal and State government bureaucracies can not, and must not be used to impede that most important of government functions, namely protecting the life and property of its citizens. The ESA and the 1986 regulations implementing the legislation have proven by bitter experience in our area to draw out, impede and in some cases make economically impossible the primary goal of our reclamation districts.

On the other hand the existence of these levees not only provide "water highways" for Federal and State water projects in California but as equal value by their continued maintenance protect existing endangered species from the ravages of flood.

Numerous levee failures in 1997 killed untold millions of endangered species in tens of thousands of flooded acres.

By passing this legislation and suspending the Endangered Species Act authority over levee rebuilding and river dredging the Congress will have taken a giant step towards insuring the continued habitat of all endangered species included the two legged ones.

requirements as defined by the Paperwork Reduction Act. The analyses under Executive Order 12291, the Regulatory Flexibility Act, and NEPA are available to the public at the Office of Endangered Species, U.S. Fish and Wildlife Service, at the address listed above.

List of Subjects in 50 CFR Part 402

Endangered and threatened wildlife, Fish, Intergovernmental relations, Plants (agriculture).

Regulation Promulgation

Accordingly, the Service revises 50 CFR Part 402 to read as follows:

PART 402—INTERAGENCY COOPERATION—ENDANGERED SPECIES ACT OF 1973, AS AMENDED

Subpart A—General

Sec.
402.01 Scope.
402.02 Definitions.
402.03 Applicability.
402.04 Counterpart regulations.
402.05 Emergencies.
402.06 Coordination with other environmental reviews.
402.07 Designation of lead agency.
402.08 Designation of non-Federal representative.
.09 Irreversible or irretrievable commitment of resources.

Subpart B—Consultation Procedures

402.10 Conference on proposed species or proposed critical habitat.
402.11 Early consultation.
402.12 Biological assessment.
402.13 Informal consultation.
402.14 Formal consultation.
402.15 Responsibilities of Federal agency following issuance of a biological opinion.
402.16 Reinitiation of formal consultation.

Authority: 16 U.S.C. 1531 *et seq.*

Subpart A—General

§ 402.01 Scope.

(a) This Part interprets and implements sections 7(a)–(d) [16 U.S.C. 1536(a)–(d)] of the Endangered Species Act of 1973, as amended ("Act"). Section 7(a) grants authority to and imposes requirements upon Federal agencies regarding endangered or threatened species of fish, wildlife, or plants ("listed species") and habitat of such species that has been designated as critical ("critical habitat"). Section 7(a)(1) of the Act directs Federal agencies, in consultation with and with the assistance of the Secretary of the Interior or of Commerce, as appropriate, to utilize their authorities to further the purposes of the Act by carrying out conservation programs for listed species. Such affirmative conservation programs must comply with applicable permit requirements (50 CFR Parts 17, 220, 222, and 227) for listed species and should be coordinated with the appropriate Secretary. Section 7(a)(2) of the Act requires every Federal agency, in consultation with and with the assistance of the Secretary, to insure that any action it authorizes, funds, or carries out, in the United States or upon the high seas, is not likely to jeopardize the continued existence of any listed species or results in the destruction or adverse modification of critical habitat. Section 7(a)(3) of the Act authorizes a prospective permit or license applicant to request the issuing Federal agency to enter into early consultation with the Service on a proposed action to determine whether such action is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat. Section 7(a)(4) of the Act requires Federal agencies to confer with the Secretary on any action that is likely to jeopardize the continued existence of proposed species or result in the destruction or adverse modification of proposed critical habitat. Section 7(b) of the Act requires the Secretary, after the conclusion of early or formal consultation, to issue a written statement setting forth the Secretary's opinion detailing how the agency action affects listed species or critical habitat. Biological assessments are required under section 7(c) of the Act if listed species or critical habitat may be present in the area affected by any major construction activity as defined in § 404.02. Section 7(d) of the Act prohibits Federal agencies and applicants from making any irreversible or irretrievable commitment of resources which has the effect of foreclosing the formulation or implementation of reasonable and prudent alternatives which would avoid jeopardizing the continued existence of listed species or resulting in the destruction or adverse modification of critical habitat. Section 7(e)–(o)(1) of the Act provide procedures for granting exemptions from the requirements of section 7(a)(2). Regulations governing the submission of exemption applications are found at 50 CFR Part 451, and regulations governing the exemption process are found at 50 CFR Parts 450, 452, and 453.

(b) The U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) share responsibilities for administering the Act. The Lists of Endangered and Threatened Wildlife and Plants are found in 50 CFR 17.11 and 17.12 and the designated critical habitats are found in 50 CFR 17.95 and 17.96 and 50 CFR Part 226. Endangered or threatened species under the jurisdiction of the NMFS are located in 50 CFR 222.23(a) and 227.4. If the subject species is cited in 50 CFR 222.23(a) or 227.4, the Federal agency shall contact the NMFS. For all other listed species the Federal Agency shall contact the FWS.

§ 402.02 Definitions.

"Act" means the Endangered Species Act of 1973, as amended, 16 U.S.C. 1531 *et seq.*

"Action" means all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by Federal agencies in the United States or upon the high seas. Examples include, but are not limited to: (a) actions intended to conserve listed species or their habitat; (b) the promulgation of regulations; (c) the granting of licenses, contracts, leases, easements, rights-of-way, permits, or grants-in-aid; or (d) actions directly or indirectly causing modifications to the land, water, or air.

"Action area" means all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action.

"Applicant" refers to any person, as defined in section 3(13) of the Act, who requires formal approval or authorization from a Federal agency as a prerequisite to conducting the action.

"Biological assessment" refers to the information prepared by or under the direction of the Federal agency concerning listed and proposed species and designated and proposed critical habitat that may be present in the action area and the evaluation potential effects of the action on such species and habitat.

"Biological opinion" is the document that states the opinion of the Service as to whether or not the Federal action is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat.

"Conference" is a process which involves informal discussions between a Federal agency and the Service under section 7(a)(4) of the Act regarding the impact of an action on proposed species or proposed critical habitat and recommendations to minimize or avoid the adverse effects.

"Conservation recommendations" are suggestions of the Service regarding discretionary measures to minimize or avoid adverse effects of a proposed action on listed species or critical habitat or regarding the development of information.

EXHIBIT "A"

"Critical habitat" refers to an area designated as critical habitat listed in 50 CFR Parts 17 or 226.

"Cumulative effects" are those effects of future State or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to consultation.

"Designated non-Federal representative" refers to a person designated by the Federal agency as its representative to conduct informal consultation and/or to prepare any biological assessment.

"Destruction or adverse modification" means a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical.

"Director" refers to the Assistant Administrator for Fisheries for the National Oceanic and Atmospheric Administration, or his authorized representative; or the Fish and Wildlife Service regional director, or his authorized representative, for the region where the action would be carried out.

"Early consultation" is a process requested by a Federal agency on behalf of a prospective applicant under section 7(a)(3) of the Act.

"Effects of the action" refers to the direct and indirect effects of an action on the species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action, that will be added to the environmental baseline. The environmental baseline includes the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions which are contemporaneous with the consultation in process. Indirect effects are those that are caused by the proposed action and are later in time, but still are reasonably certain to occur. Interrelated actions are those that are part of a larger action and depend on the larger action for their justification. Interdependent actions are those that have no independent utility apart from the action under consideration.

"Formal consultation" is a process between the Service and the Federal agency that commences with the Federal agency's written request for consultation under section 7(a)(2) of the Act and concludes with the Service's issuance of the biological opinion under section 7(b)(3) of the Act.

"Incidental take" refers to takings that result from, but are not the purpose of, carrying out an otherwise lawful activity conducted by the Federal agency or applicant.

"Informal consultation" is an optional process that includes all discussions, correspondence, etc., between the Service and the Federal agency or the designated non-Federal representative prior to formal consultation, if required.

"Jeopardize the continued existence of" means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.

"Listed species" means any species of fish, wildlife, or plant which has been determined to be endangered or threatened under section 4 of the Act. Listed species are found in 50 CFR 17.11–17.12.

"Major construction activity" is a construction project (or other undertaking having similar physical impacts) which is a major Federal action significantly affecting the quality of the human environment as referred to in the National Environmental Policy Act [NEPA, 42 U.S.C. 4332(2)(C)].

"Preliminary biological opinion" refers to an opinion issued as a result of early consultation.

"Proposed critical habitat" means habitat proposed in the Federal Register to be designated or revised as critical habitat under section 4 of the Act for any listed or proposed species.

"Proposed species" means any species of fish, wildlife, or plant that is proposed in the Federal Register to be listed under section 4 of the Act.

"Reasonable and prudent alternatives" refer to alternative actions identified during formal consultation that can be implemented in a manner consistent with the intended purpose of the action, that can be implemented consistent with the scope of the Federal agency's legal authority and jurisdiction, that is economically and technologically feasible, and that the Director believes would avoid the likelihood of jeopardizing the continued existence of listed species or resulting in the destruction or adverse modification of critical habitat.

"Reasonable and prudent measures" refer to those actions the Director believes necessary or appropriate to minimize the impacts, *i.e.*, amount or extent, of incidental take.

"Recovery" means improvement in the status of listed species to the point at which listing is no longer appropriate under the criteria set out in section 4(a)(1) of the Act.

"Service" means the U.S. Fish and Wildlife Service or the National Marine Fisheries Service, as appropriate.

§402.03 Applicability.

Section 7 and the requirements of this Part apply to all actions in which there is discretionary Federal involvement or control.

§402.04 Counterpart regulations.

The consultation procedures set forth in this Part may be superseded for a particular Federal agency by joint counterpart regulations among that agency, the Fish and Wildlife Service, and the National Marine Fisheries Service. Such counterpart regulations shall be published in the Federal Register in proposed form and shall be subject to public comment for at least 60 days before final rules are published.

§402.05 Emergencies.

(a) Where emergency circumstances mandate the need to consult in an expedited manner, consultation may be conducted informally through alternative procedures that the Director determines to be consistent with the requirements of sections 7(a)–(d) of the Act. This provision applies to situations involving acts of God, disasters, casualties, national defense or security emergencies, etc.

(b) Formal consultation shall be initiated as soon as practicable after the emergency is under control. The Federal agency shall submit information on the nature of the emergency action(s), the justification for the expedited consultation, and the impacts to endangered or threatened species and their habitats. The Service will evaluate such information and issue a biological opinion including the information and recommendations given during the emergency consultation.

§402.06 Coordination with other environmental reviews.

(a) Consultation, conference, and biological assessment procedures under section 7 may be consolidated with interagency cooperation procedures required by other statutes, such as the National Environmental Policy Act (NEPA) (42 U.S.C. 4321 *et seq.*, implemented at 40 CFR Parts 1500–1508) or the Fish and Wildlife Coordination Act (FWCA) (16 U.S.C. 661 *et seq.*). Satisfying the requirements of these other statutes, however, does not in itself relieve a Federal agency of its obligations to comply with the procedures set forth in this Part or the substantive requirements of section 7. The Service will attempt to provide a coordinated review and analysis of all environmental requirements.

(b) Where the consultation or conference has been consolidated with the interagency cooperation procedures required by other statutes such as NEPA or FWCA, the results should be included in the documents required by those statutes.

§402.07 Designation of lead agency.

When a particular action involves more than one Federal agency, the consultation and conference responsibilities may be fulfilled through a lead agency. Factors relevant in determining an appropriate lead agency include the time sequence in which the agencies would become involved, the magnitude of their respective involvement, and their relative expertise with respect to the environmental effects of the action. The Director shall be notified of the designation in writing by the lead agency.

§402.08 Designation of non-Federal representative.

A Federal agency may designate a non-Federal representative to conduct informal consultation or prepare a biological assessment by giving written notice to the Director of such designation. If a permit or license applicant is involved and is not the designated non-Federal representative, then the applicant and Federal agency must agree on the choice of the designated non-Federal representative. If a biological assessment is prepared by the designated non-Federal representative, the Federal agency shall furnish guidance and supervision and shall independently review and evaluate the scope and contents of the biological assessment. The ultimate responsibility for compliance with section 7 remains with the Federal agency.

§402.09 Irreversible or irretrievable commitment of resources.

After initiation or reinitiation of consultation required under section 7(a)(2) of the Act, the Federal agency and any applicant shall make no irreversible or irretrievable commitment of resources with respect to the agency action which has the effect of foreclosing the formulation or implementation of any reasonable and prudent alternatives which would avoid violating section 7(a)(2). This prohibition is in force during the consultation process and continues until the requirements of section 7(a)(2) are satisfied. This provision does not apply to the conference requirement for proposed species or proposed critical habitat under section 7(a)(4) of the Act.

Subpart B—Consultation Procedures

§ 402.10 Conference on proposed species or proposed critical habitat.

(a) Each Federal agency shall confer with the Service on any action which is likely to jeopardize the continued existence of any proposed species or result in the destruction or adverse modification of proposed critical habitat. The conference is designed to assist the Federal agency and any applicant in identifying and resolving potential conflicts at an early stage in the planning process.

(b) The Federal agency shall initiate the conference with the Director. The Service may request a conference if, after a review of available information, it determines that a conference is required for a particular action.

(c) A conference between a Federal agency and the Service shall consist of informal discussions concerning an action that is likely to jeopardize the continued existence of the proposed species or result in the destruction or adverse modification of the proposed critical habitat at issue. Applicants may be involved in these informal discussions to the greatest extent practicable. During the conference, the Service will make advisory recommendations, if any, on ways to minimize or avoid adverse effects. If the proposed species is subsequently listed or the proposed critical habitat is designated prior to completion of the action, the Federal agency must review the action to determine whether formal consultation is required.

(d) If requested by the Federal agency and deemed appropriate by the Service, the conference may be conducted in accordance with the procedures for formal consultation in § 402.14. An opinion issued at the conclusion of the conference may be adopted as the biological opinion when the species is listed or critical habitat is designated, but only if no significant new information is developed (including that developed during the rulemaking process on the proposed listing or critical habitat designation) and no significant changes to the Federal action are made that would alter the content of the opinion. An incidental take statement provided with a conference opinion does not become effective unless the Service adopts the opinion once the listing is final.

(e) The conclusions reached during a conference and any recommendations shall be documented by the Service and provided to the Federal agency and to any applicant. The style and magnitude of this document will vary with the complexity of the conference. If formal consultation also is required for a particular action, then the Service will provide the results of the conference with the biological opinion.

§ 402.11 Early consultation.

(a) *Purpose.* Early consultation is designed to reduce the likelihood of conflicts between listed species or critical habitat and proposed actions and occurs prior to the filing of an application for a Federal permit or license. Although early consultation is conducted between the Service and the Federal agency, the prospective applicant should be involved throughout the consultation process.

(b) *Request by prospective applicant.* If a prospective applicant has reason to believe that the prospective action may affect listed species or critical habitat, it may request the Federal agency to enter into early consultation with the Service. The prospective applicant must certify in writing to the Federal agency that (1) it has a definitive proposal outlining the action and its effects and (2) it intends to implement its proposal, if authorized.

(c) *Initiation of early consultation.* If the Federal agency receives the prospective applicant's certification in paragraph (b) of this section, then the Federal agency shall initiate early consultation with the Service. This request shall be in writing and contain the information outlined in § 402.14(c) and, if the action is a major construction activity, the biological assessment as outlined in § 402.12.

(d) *Procedures and responsibilities.* The procedures and responsibilities for early consultation are the same as outlined in § 402.14(c)–(j) for formal consultation, except that all references to the "applicant" shall be treated as the "prospective applicant" and all references to the "biological opinion" or the "opinion" shall be treated as the "preliminary biological opinion" for the purpose of this section.

(e) *Preliminary biological opinion.* The contents and conclusions of a preliminary biological opinion are the same as for a biological opinion issued after formal consultation except that the incidental take statement provided with a preliminary biological opinion does not constitute authority to take listed species.

(f) *Confirmation of preliminary biological opinion as final biological opinion.* A preliminary biological opinion may be confirmed as a logical opinion issued after formal consultation if the Service reviews the proposed action and finds that there have been no significant changes in the action as planned or in the information used during the early consultation. A written request for confirmation of the preliminary biological opinion should be submitted after the prospective applicant applies to the Federal agency for a permit or license but prior to the issuance of such permit or license. Within 45 days of receipt of the Federal agency's request, the Service shall either: (1) confirm that the preliminary biological opinion stands as a final biological opinion; or (2) if the findings noted above cannot be made, request that the Federal agency initiate formal consultation.

§402.12 Biological assessments.

(a) *Purpose.* A biological assessment shall evaluate the potential effects of the action on listed and proposed species and designated and proposed critical habitat and determine whether any such species or habitat are likely to be adversely affected by the action and is used in determining whether formal consultation or a conference is necessary.

(b) *Preparation requirement.* (1) The procedures of this section are required for Federal actions that are "major construction activities"; provided that a contract for construction was not entered into or actual construction was not begun on or before November 10, 1978. Any person, including those who may wish to apply for an exemption from section 7(a)(2) of the Act, may prepare a biological assessment under the supervision of the Federal agency and in cooperation with the Service consistent with the procedures and requirements of this section. An exemption from the requirements of section 7(a)(2) is not permanent unless a biological assessment has been prepared.

(2) The biological assessment shall be completed before any contract for construction is entered into and before construction is begun.

(c) *Request for information.* The Federal agency or the designated non-Federal representative shall convey to the Director either (1) a written request for a list of any listed or proposed species or designated or proposed critical habitat that may be present in the action area; or (2) a written notification of the species and critical habitat that are being included in the biological assessment.

(d) *Director's response.* Within 30 days of receipt of the notification of, or the request for, a species list, the Director shall either concur with or revise the list or, in those cases where no list has been provided, advise the Federal agency or the designated non-Federal representative in writing whether, based on the best scientific and commercial data available, any listed or proposed species or designated or proposed critical habitat may be present in the action area. In addition to listed and proposed species, the Director will provide a list of candidate species that may be present in the action area. Candidate species refers to any species being considered by the Service for listing as endangered or threatened species but not yet the subject of a proposed rule. Although candidate species have no legal status and are accorded no protection under the Act, their inclusion will alert the Federal agency of potential proposals or listings.

(1) If the Director advises that no listed species or critical habitat may be present, the Federal agency need not prepare a biological assessment and further consultation is not required. If only proposed species or proposed critical habitat may be present in the action area, then the Federal agency must confer with the Service if required under §402.10, but preparation of a biological assessment is not required unless the proposed listing and/or designation becomes final.

(2) If a listed species or critical habitat may be present in the action area, the Director will provide a species list or concur with the species list provided. The Director also will provide available information (or references thereto) regarding these species and critical habitat, and may recommend discretionary studies or surveys that may provide a better information base for the preparation of an assessment. Any recommendation for studies or surveys is not to be construed as the Service's opinion that the Federal agency has failed to satisfy the information standard of section 7(a)(2) of the Act.

(e) *Verification of current accuracy of species list.* If the Federal agency or the designated non-Federal representative does not begin preparation of the biological assessment within 90 days of receipt of (or concurrence with) the species list, the Federal agency or the designated non-Federal representative must verify (formally or informally) with the Service the current accuracy of the species list at the time the preparation of the assessment is begun.

(f) *Contents.* The contents of a biological assessment are at the discretion of the Federal agency and will depend on the nature of the Federal action. The following may be considered for inclusion:

(1) The results of an on-site inspection of the area affected by the action to determine if listed or proposed species are present or occur seasonally.

(2) The views of recognized experts on the species at issue.

(3) A review of the literature and other information.

(4) An analysis of the effects of the action on the species and habitat, including consideration of cumulative effects, and the results of any related studies.

(5) An analysis of alternate actions considered by the Federal agency for the proposed action.

(g) *Incorporation by reference.* If a proposed action requiring the preparation of a biological assessment is identical, or very similar, to a previous action for which a biological assessment was prepared, the Federal agency may fulfill the biological assessment requirement for the proposed action by incorporating by reference the earlier biological assessment, plus any supporting data from other documents that are pertinent to the consultation, into a written certification that:

(1) The proposed action involves similar impacts to the same species in the same geographic area;

(2) No new species have been listed or proposed or no new critical habitat designated or proposed for the action area; and

(3) The biological assessment has been supplemented with any relevant changes in information.

(h) *Permit requirements.* If conducting a biological assessment will involve the taking of a listed species, a permit under section 10 of the Act (16 U.S.C. 1539) and Part 17 of this Title (with respect to species under the jurisdiction of the FWS) or Parts 220, 222, and 227 of this Title (with respect to species under the jurisdiction of the NMFS) is required.

(i) *Completion time.* The Federal agency or the designated non-Federal representative shall complete the biological assessment within 180 days after its initiation (receipt of or concurrence with the species list) unless a different period of time is agreed to by the Director and the Federal agency. If a permit or license applicant is involved, the 180-day period may not be extended unless the agency provides the applicant, before the close of the 180-day period, with a written statement setting forth the estimated length of the proposed extension and the reasons why such an extension is necessary.

(j) *Submission of biological assessment.* The Federal agency shall bmit the completed biological assessment to the Director for review. The Director will respond in writing within 30 days as to whether or not he concurs with the findings of the biological assessment. At the option of the Federal agency, formal consultation may be initiated under § 402.14(c), concurrently with the submission of the assessment.

(k) *Use of the biological assessment.* (1) The Federal agency shall use the biological assessment in determining whether formal consultation or a conference is required under § 402.14 or § 402.10, respectively. If the biological assessment indicates that there are no listed species or critical habitat present that are likely to be adversely affected by the action and the Director concurs as specified in paragraph (j) of this section, then formal consultation is not required. If the biological assessment indicates that the action is not likely to jeopardize the continued existence of proposed species or result in the destruction or adverse modification of proposed critical habitat, and the Director concurs, then a conference is not required.

(2) The Director may use the results of biological assessment in (i) determining whether to request the Federal agency to initiate formal consultation or a conference, (ii) formulating a biological opinion, or (iii) formulating a preliminary biological opinion.

§ 402.13 Informal consultation.

(a) Informal consultation is an optional process that includes all discussions, correspondence, etc., between the Service and the Federal agency or the designated non-Federal representative, designed to assist the Federal agency in determining whether formal consultation or a conference is required. If during informal consultation it is determined by the Federal agency, with the written concurrence of the Service, that the action is not likely to adversely affect listed species or critical habitat, the consultation process is terminated, and no further action is necessary.

(b) During informal consultation, the Service may suggest modifications to the action that the Federal agency and any applicant could implement to avoid the likelihood of adverse effects to listed species or critical habitat.

§ 14 Formal consultation.

(a) *Requirement for formal consultation.* Each Federal agency shall review its actions at the earliest possible time to determine whether any action may affect listed species or critical habitat. If such a determination is made, formal consultation is required, except as noted in paragraph (b) of this section. The Director may request a Federal agency to enter into consultation if he identifies any action of that agency that may affect listed species or critical habitat and for which there has been no consultation. When such a request is made, the Director shall forward to the Federal agency a written explanation of the basis for the request.

(b) *Exceptions.* (1) A Federal agency need not initiate formal consultation if, as a result of the preparation of a biological assessment under § 402.12 or as a result of informal consultation with the Service under § 402.13, the Federal agency determines, with the written concurrence of the Director, that the proposed action is not likely to adversely affect any listed species or critical habitat.

(2) A Federal agency need not initiate formal consultation if a preliminary biological opinion, issued after early consultation under § 402.11, is confirmed as the final biological opinion.

(c) *Initiation of formal consultation.* A written request to initiate formal consultation shall be submitted to the Director and shall include:

(1) A description of the action to be considered;

(2) A description of the specific area that may be affected by the action;

(3) A description of any listed species or critical habitat that may be affected by the action;

(4) A description of the manner in which the action may affect any listed species or critical habitat and an analysis of any cumulative effects;

(5) Relevant reports, including any environmental impact statement, environmental assessment, or biological assessment prepared; and

(6) Any other relevant available information on the action, the affected listed species, or critical habitat.

Formal consultation shall not be initiated by the Federal agency until any required biological assessment has been completed and submitted to the Director in accordance with § 402.12. Any request for formal consultation may encompass, subject to the approval of the Director, a number of similar individual actions within a given geographical area or a segment of a comprehensive plan. This does not relieve the Federal agency of the requirements for considering the effects of the action as a whole.

(d) *Responsibility to provide best scientific and commercial data available.* The Federal agency requesting formal consultation shall provide the Service with the best scientific and commercial data available or which can be obtained during the consultation for an adequate review of the effects that an action may have upon listed species or critical habitat. This information may include the results of studies or surveys conducted by the Federal agency or the designated non-Federal representative. The Federal agency shall provide any applicant with the opportunity to submit information for consideration during the consultation.

(e) *Duration and extension of formal consultation.* Formal consultation concludes within 90 days after its initiation unless extended as provided below. If an applicant is not involved, the Service and the Federal agency may mutually agree to extend the consultation for a specific time period. If an applicant is involved, the Service and the Federal agency may mutually agree to extend the consultation provided that the Service submits to the applicant, before the close of the 90 days, a written statement setting forth:

(1) The reasons why a longer period is required,

(2) The information that is required to complete the consultation, and

(3) The estimated date on which the consultation will be completed.

A consultation involving an applicant cannot be extended for more than 60 days without the consent of the applicant. Within 45 days after concluding formal consultation, the Service shall deliver a biological opinion to the Federal agency and any applicant.

(f) *Additional data.* When the Service determines that additional data would provide a better information base from which to formulate a biological opinion, the Director may request an extension of formal consultation [illegible] request that the Federal agency obtain additional data to determine how or to what extent the action may affect listed species or critical habitat. If formal consultation is extended by mutual agreement according to § 402.14(e), the Federal agency shall obtain, to the extent practicable, that data which can be developed within the scope of the extension. The responsibility for conducting and funding any studies belongs to the Federal agency and the applicant, not the Service. The Service's request for additional data is not to be construed as the Service's opinion that the Federal agency has failed to satisfy the information standard of section 7(a)(2) of the Act. If no extension of formal consultation is agreed to, the Director will issue a biological opinion

United States Department of the Interior

FISH AND WILDLIFE SERVICE

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In Reply Refer To:
1-1-94-F-11

July 20, 1994

Mr. Art Champ
Regulatory Section; Ms. Kathy Norton
U.S. Army Corps of Engineers
1325 J Street
Sacramento, California 95814-2922

Subject: Biological Opinion on the Formal Section 7 Consultation for River Mile 25.5, Mokelumne River, San Joaquin County, California (Case number 1-1-94-F-11)

Dear Mr. Champ:

This responds to your December 15, 1994, request for formal consultation pursuant to Section 7 of the Endangered Species Act of 1973, as amended (Act). At issue are the effects of the proposed repair of the west bank of the Mokelumne River at river mile 25,5 near the Thorton, San Joaquin County, California, on the federally listed threatened valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) (beetle) and its elderberry (*Sambucus* species) habitat. Your consultation request was received on December 21, 1993. This formal consultation is based on the letter from your office to U.S. Fish and Wildlife Service (Service) dated December 15, 1993; a letter from your office to the Service, dated April 8, 1994, that was received on April 15, 1994; telephone conversations between Kathy Norton of your office and Chris Nagano of my staff on March 29, 1994, and April 8, 1994; and telephone conversations between Henry Matsunaga, consultant for the applicant, and Chris Nagano on April 5, 1994, and June 27, 1994.

Biological Opinion

It is our biological opinion that the repair of the west bank of the Mokelumne River at river mile 25.5 near the Thorton, San Joaquin County, California, as proposed, is not likely to jeopardize the continued existance of the threatened valley elderberry longhorn beetle and is not likely to result in destruction or adverse modification of its critical habitat. Although critical habitat has been designated for the beetle, none is found within the proposed project area.

Description of the Proposed Action

Please refer to the following documents for a description of the proposed project: 1) A letter from your office to the Service dated December 15,

EXHIBIT "B"

1993 (letter 1); and 2) a letter from your office to the Service, dated April 8, 1994 (letter 2).

In brief, the proposed project is the repair of the west bank of the Mokelumne River at river mile 25.5 near Thorton, San Joaquin County, California. A biological assessment has not been provided by the Corps. Mr. Matsunaga stated in a telephone conversation on April 5, 1994, that he was going to prepare and submit a mitigation plan. On April 8, 1994, Chris Nagano advised the Corps that a mitigation plan had not been submitted and he requested that your agency withdraw the request for formal consultation until a biological assessment had been completed. Letter 2 extended the consultation for sixty (60) days to allow the applicant to complete a mitigation plan. However, as of this date, no such document has been received by the Service. Letter 1 stated that at least eleven elderberry shrubs and clumps were found growing at the proposed project site. Mr. Henry Matsunaga stated in a telephone conversation with Chris Nagano on June 27, 1994, that the mitigation plan had still not been completed and that approximately 16000 square feet (0.37 acre) of riparian habitat would be eliminated by the project. The Service will assume for this analysis that this project, as proposed, would result in the removal of all valley elderberry longhorn beetles inhabiting all elderberry shrubs that contain stems one inch or greater in diameter growing on 0.37 acres.

The U.S. Fish and Wildlife Service (Service) has developed compensation guidelines for the valley elderberry longhorn beetle (USFWS 1993) that recommend measures to offset adverse impacts to the species and its habitat. Copies of these guidelines were provided earlier to your staff and the applicant.

Species Account/Environmental Baseline

The valley elderberry longhorn beetle is dependent on its host plant, the elderberry. Use of the plants by the animal, a wood borer, is rarely apparent. Frequently, the only exterior evidence of the shrub's use by the beetle is an exit hole created by the larvae prior to pupal stage. The Valley Elderberry Longhorn Beetle Recovery Plan (1984) and Barr (1991) contain further details on the beetle's life history.

Based on the available information, the Service anticipates that all valley elderberry longhorn beetles inhabiting all elderberry shrubs in a 16000 square foot (0.37 acre) area would be lost as a result of project construction. The Corps and the consultant for the applicant did not present any information on the number of these plants that contain stems one inch or greater in diameter that would be adversely affected by the proposed project's construction. The Corps and the consultant for the applicant did not provide any information on the number of elderberry shrubs that show evidence of use by the beetle, i.e, emergence holes. However, because of the fact that the locality lies within the known range and habitat of the beetle, it is likely that the animal is utilizing the site.

Effects of the Action

The Service has determined that all elderberry plants would be lost during construction at the site. Based on the available information, the Service anticipates that all valley elderberry longhorn beetles inhabiting all elderberry shrubs in a 16000 square foot area would be lost as a result of project construction. This action is expected to adversely impact the threatened valley elderberry longhorn beetle. The compensation plan discussed in the project section of this biological opinion would offset adverse impacts to the valley elderberry longhorn beetle and its habitat so that the project will not appreciably reduce the likelihood of its survival and recovery.

Cumulative Effects

Cumulative effects are those impacts of future State, local, and private actions affecting endangered and threatened species that are reasonably certain to occur in the action area. This area in San Joaquin County is being developed, primarily by private parties for agricultural activities. However, actions of which we are aware of at this time together with those addressed in this biological opinion are not expected to appreciably reduce the likelihood of the survival and recovery of the valley elderberry longhorn beetle.

Incidental Take

Section 9 of the Endangered Species Act prohibits any taking (harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to engage in any such conduct) of listed wildlife species without special exemption. Under the terms of Section 7(b)(4) and 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered prohibited taking within the bounds of the Act provided that such taking is in compliance with this Incidental Take statement. The measures described below are not discretionary, and must be undertaken by the action agency or made a binding condition of any authorization or permit issued to the applicant, as appropriate.

Proposed project actions that may result in the death or injury of listed species have been previously discussed in this biological opinion. Loss of elderberry habitat would be confined to the project boundaries. There is no way to estimate the number of beetle larvae contained within each elderberry. From recent field work on the Cosumnes River and the Folsom Lake area, we know that larvae galleries can be found in stems with no evidence of emergence holes (either the larvae succumb prior to constructing the emergence hole or they have not come far enough along in the developmental process to construct their hole). Larvae appear to be distributed in stems 1.0 inches or larger in diameter at ground level. Because we do not know how many larvae each stem can support, we cannot simply multiply the number of stems by a given number to estimate the number of beetles present. For these reasons, we present the estimate of incidental take of the beetle in terms of the number of plants that will be lost. Based on the available information, the Service anticipates that all valley elderberry longhorn beetles inhabiting 16000 square feet (0.37 acre) of riparian habitat would be lost as a result of project construction.

The following reasonable and prudent measures are necessary and appropriate to minimize the take:

1. Loss of elderberry habitat shall be confined to the proposed project site.

2. The impact of habitat modification or loss shall be minimized by providing additional elderberry shrubs in the form of seedlings that will be planted at a mitigation site. All elderberry shrubs that will be adversely affected by the project shall be transplanted to the mitigation area.

3. A worker education program shall be undertaken on the importance of protecting valley elderberry beetle habitat to minimize take of the threatened valley elderberry longhorn beetle.

In order to be exempt from the prohibitions of Section 9 of the Act, the following terms and conditions, which implement the reasonable and prudent measures described above, must be complied with:

1. The following term and condition shall implement reasonable and prudent measure (1):

    a. All elderberry bushes adjacent to the project site shall be avoided during and following construction.

2. The following terms and conditions shall implement reasonable and prudent measure (2):

    a. All elderberry shrubs with stems one inch or greater in diameter at ground level shall be transplanted to a mitigation area. The Corps shall obtain written approval from the Service that the mitigation area is adequate at least thirty (30) days prior to the initiation of project construction.

    b. The loss of the elderberry shrub and riparian habitat of the beetle shall be mitigated for at a 5:1 ratio. Therefore, the 0.37-acre site shall be replaced with 1.85-acres of equivalent habitat. All elderberry stems that are one inch or greater at ground level shall be replaced with elderberry seedlings at a 5:1 ratio. An appropriate number of associated native plants (see k below) shall be included in the mitigation area. A management plan for the 1.85-acre mitigation area that has been approved by the Service shall be completed by the Corps at least thirty (30) days prior to the initiation of project construction.

c. The applicant shall insure that 1.85-acres at the mitigation site are designated as habitat for the valley elderberry longhorn beetle in perpetuity. The mitigation site shall be designated to prevent isolation of this beetle population from populations located in adjacent areas. A conservation easement or fee-title for the mitigation area shall be given to a resource agency or appropriate private conservation organization. The fee-title or conservation easement shall include adequate compensation that ensures management of the mitigation area in perpetuity.

d. A qualified biologist (monitor) shall be on-site for the duration of the transplanting of the elderberry shrubs to insure that no unnecessary take of the valley elderberry longhorn beetle occurs. The biologist utilized shall have the authority to stop all activities until appropriate corrective measures have been completed. The biologist shall also be required to report violations immediately to the Service and the California Department of Fish and Game.

e. Measures must be taken to insure that no pesticides, herbicides, fertilizers, or other chemical agents enters the mitigation area. No spraying of these agents is to be conducted within one hundred (100) feet of the area or if they have the potential to drift, flow or be washed in the area in the opinion of biologists or law enforcement personnel from the California Department of Fish and Game or the Service. The Service shall be provided with written documentation that this condition will be carried out in perpetuity. This condition shall be included in the conservation easement if fee-title is not given to an appropriate resource agency or private conservation organization.

f. No dumping of trash or other material shall occur within the mitigation area. The Service shall be provided with written documentation that this condition will be carried out in perpetuity.

g. Yellow star thistle (*Centaurea solstitialis*) and other invasive non-native plant species shall be removed on an annual basis in perpetuity from the mitigation area. Mechanical means shall be used to remove the exotic plants. Herbicides or other chemical agents shall not be utilized.

h. Biologists and law enforcement personnel from the California Department of Fish and Game and the Service shall be given complete access to the project to monitor transplanting activities. Personnel from both these agencies shall be given complete access to the mitigation site to monitor the valley elderberry longhorn beetle and its elderberry shrub habitat in perpetuity.

i. Permanent fencing shall be placed completely around the mitigation area to prevent unauthorized entry by off-road vehicles, equestrians, or other parties that may damage or destroy the habitat of the beetle.

j. Two prominent signs shall be placed and maintained in perpetuity at the mitigation area noting that this area is habitat of the federally threatened valley elderberry longhorn beetle and include information on the beetle's biology and ecology. The signs must be approved by the Service. They shall be replaced or repaired within ten (10) working days if they are found to be damaged or destroyed.

k. Recent studies have found that beetles were more abundant in more dense native plant communities with a mature overstory and mixed understory versus a young overstory and low understory. Therefore, a mix of appropriate native appropriate trees or shrubs that are found at the project site shall be planted at a ratio of at least two of these species for every five elderberry seedlings. These plantings also shall be monitored with the same survival criteria utilized for the elderberry plants. The saplings and seedlings, as appropriate, shall be from native populations at the mitigation site or from the immediate vicinity.

l. The population of the adults of the threatened valley elderberry longhorn beetle, the general condition of the mitigation area shall be monitored by a qualified biologist annually for a period of 10 years beginning with the date the mitigation program is initiated. Two visits between February 14 and June 30 of each year shall be made beginning the year the mitigation is begun. The study shall include a population census of the adult beetles, including the actual number of animals observed, their condition, behavior, and precise location at the site; a census of the elderberry plants, including the number of plants observed, their size, and condition; and a general assessment of the habitat, including any real or potential threats to the beetle, and its food plants, such as erosion, excessive grazing by livestock, off-road vehicle use, etc. Random-walk counts shall be used; mark-recapture or other methods that involve handling or harassment shall not be utilized. The materials and methods that will be utilized for this study shall be reviewed and approved by the Service. All appropriate Federal and State permits shall be obtained prior to initiating the field studies.

m. A written report analyzing the data from the monitoring of the threatened valley elderberry longhorn beetle at the mitigation area shall be conveyed to the Service and the Department of Fish and Game (Supervisor, Environmental Service, Department of Fish and Game, 1416 Ninth Street, Sacramento, California 95814, and Dee Warenycia, Department of Fish and Game, 1220 S Street, Sacramento, California 95814) by December 31 of each year for a 10 year period beginning with the date the program is initiated. The report shall include, but not be limited to, the raw data collected during the field surveys and a basic analysis of the population dynamics of the valley elderberry longhorn beetle at the mitigation area. The population size (qualitative) should be estimated for the beetle. Maps showing where the individual adult beetles and exit holes were observed shall be included. For the elderberry plants the following shall be analyzed: the survival rate, condition, and size of the plants. Real and likely future threats shall be addressed along with suggested mitigations (e.g. fencing access to off-road vehicles, more frequent removal of exotic vegetation, etc.). The original field notes, photographs, correspondence, and all other pertinent material, as well as a copy of the report must be deposited and accessioned into the California Academy of Sciences (Entomology Department, California Academy of Sciences, Golden Gate Park, San Francisco, California 94118) by December 31 of each year for a 10 year period beginning with the date the mitigation program is initiated. The Sacramento Field Office shall be provided with the accession numbers given to this material by the California Academy of Sciences.

n. A survival rate of 80 percent of the elderberry shrubs and associated native plants shall be obtained at the end of the 10 year monitoring program.

3. The following term and condition shall implement reasonable and prudent measure (3):

a. All on-site personnel must receive instruction regarding the presence of the threatened valley elderberry longhorn beetle.

The Service is to be notified within 3 working days of the finding of any dead valley elderberry longhorn beetles or any unanticipated harm to elderberry host plants associated with project construction. The Service contact person for this information is Chris Nagano (916/978-4866). Any valley elderberry longhorn adult beetles or their larvae found injured shall be turned in to the California Department of Fish and Game. The agency contact is the Supervisor of Environmental Services (916/322-5574). Any valley elderberry longhorn beetles found dead shall be deposited in the Entomology Department of the California Academy of Sciences. The agency contact is Dr. David Kavanaugh (415/221-4214).

Conservation Recommendations

Section 7(a)(1) of the Act directs Federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. The term "conservation recommendations" has been defined as suggestions from the Service regarding discretionary measures to minimize or avoid adverse effects of a proposed action on listed species or critical habitat or regarding the development of information. Measures generally recommended have been incorporated into the mitigation plan for the proposed project. We do not have any conservation recommendations for the proposed project at this time.

This concludes formal consultation on work described in the biological assessment. Reinitiation of formal consultation is required if the amount or extent of incidental take is exceeded, if new information reveals effects of the actions that may affect listed species or critical habitat in a manner that was not considered in this opinion, and/or if a new species is listed or critical habitat is designated that may be affected by the action. If you have any questions regarding this opinion, please contact Chris Nagano of my staff at the letterhead address or at 916/978-4866.

Sincerely

for Joel A. Medlin
Field Supervisor

cc: FWS:ES, Portland, OR
CDFG:Environmental Services, Sacramento, CA
CDFG, Sacramento, CA (Attn: D. Warenycia)

STATEMENT OF

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

REGARDING

IMPACTS OF THE ENDANGERED SPECIES ACT ON FLOOD CONTROL ACTIVITIES

O: U.S. House of Representatives
Committee on Resources
Washington, D.C.
April 10, 1997

Honorable Dan Young, Chairman

From: David P. Zappe
General Manager-Chief Engineer
Riverside County Flood Control
and Water Conservation District

IMPACTS OF THE ENDANGERED SPECIES ACT ON FLOOD CONTROL ACTIVITIES

The Riverside County Flood Control and Water Conservation District (District) appreciates this opportunity to present the Committee with information regarding the impacts of the Endangered Species Act on flood control activities of the District, and the public it serves, and to provide recommendations for reform.

MAINTENANCE ISSUES

During the District's fifty year history, it has developed an extensive flood control system in western Riverside County including 35 dams, debris basins and detention basins, 48 miles of levees, 188 miles of open channel and 182 miles of underground storm drain. Several of these projects have been constructed in partnership with such Federal agencies as the U.S. Army Corps of Engineers (Corps), the Soil Conservation Service (now the Natural Resources Conservation Service) and the U.S. Forest Service.

Proper operation and maintenance of this flood control system is critical to protect the life and property of the residents of western Riverside County, and is essential to ensure that economic activity and transportation corridors are not disrupted during times of flooding. In the case of projects constructed with Federal partners, the District is mandated to operate and maintain those projects to standards dictated by the Federal agencies, as well as indemnifying and holding these agencies harmless from all liability and damages.

There are additional Federal mandates for flood control maintenance. In order to participate in the National Flood Insurance Program, the Federal Emergency Management Agency (FEMA) requires the "Community", in this case Riverside County and its incorporated Cities, to maintain the carrying capacity of all flood control facilities, and in some cases even semi-natural creeks and rivers. As owner of most of the regional facilities this maintenance responsibility ultimately falls on the District. Communities which fail to meet their maintenance responsibility are subject to expulsion from the National Flood Insurance Program, loss of other Federal aid, and even exposure to suits by FEMA for recovery of flood insurance and disaster payments.

For decades, the District routinely maintained its flood control system without interference, but over the past five to six years, has been hamstrung in this effort through the regulatory activities of several Federal agencies including the Corps, the Environmental Protection Agency (EPA), and the U.S. Fish and Wildlife Service (Service). These agencies have effectively been given veto power over local flood control maintenance activities by virtue of a myriad of regulations promulgated under authority of the Federal Clean Water Act (CWA) and the Federal Endangered Species Act (ESA). Although these laws have been on the books for many years, their impacts have steadily grown more burdensome as Federal agencies have issued new and more stringent regulations without the authority of new law, often as a means to negotiate settlement of environmental lawsuits of questionable merit such as the recently overturned suit which established the Tulloch Rule. In addition, the Service has recently stepped up its pace of new listings of endangered species. The result is that formerly routine maintenance activities of existing flood control facilities, many built in Federal partnership, are now subject to onerous Federal permit and mitigation requirements, along with the attendant delays, increased costs, and ongoing threat to the public health and safety.

Today, under the Federal Clean Water Act, three separate permits are required to operate and maintain the District's flood control systems. First, a National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit is required simply to discharge stormwaters to so called "waters of the United States". Although the District agrees reasonable regulation of stormwater discharges is necessary, the NPDES Program as currently constituted imposes a massive unfunded mandate on local government without proof of a commensurate return in water quality benefits. Secondly, a Section 404 Dredge and Fill Permit must be obtained from the Corps for any project which "discharges" fill to waters of the United States. Under Section 7 of the ESA, the Corps is required to "consult" with the Service where a permitted activity may jeopardize an endangered of threatened species or "critical" habitat, and the EPA retains veto power over any permit issued by the Corps with which they disagree. Finally, a Section 401 Water Quality Certification or Waiver must be obtained before any given 404 Permit becomes valid. Since California is an "NPDES State", this process has been delegated by EPA to the State Water Resources Control Board.

The District believes that conformance to this web of multiple Federal permits places an unreasonable burden on local government attempting to meet its obligation to protect the public through timely maintenance of flood control systems. Many examples of problems with the regulatory environment can be cited:

- In January of 1993, the Old Town area of the City of Temecula was subjected to major flooding by overflow from Murrieta Creek. Flows raged through shops, stores and restaurants several feet deep, resulting in over ten million dollars of property damage. Miraculously no one was killed as a direct result, but in a number of cases citizens escaped their cars just before they were swept away. Some of the businesses never fully recovered and no longer exist. Prior to the flood, Federal officials had refused to allow mechanical clearing of vegetation and removal of accumulated sediment on the creek, partially due to alleged concerns about the endangered least Bell's vireo, and only after the damage occurred did they allow the critically needed flood control maintenance to take place. Ironically, FEMA, another Federal agency, later reimbursed the District and the City of Temecula for much of the cost of the post flood maintenance under a Federal Disaster Declaration, and also paid flood insurance and damage claims to those flooded.

- During the early 1990's, the District was advised by a U.S. Fish and Wildlife representative that we could not control burrowing rodents in two large earth fill dams, Alessandro Dam in the City of Riverside, and Pigeon Pass Dam in the City of Moreno Valley. The concern expressed was that filling of rodent burrows could result in an incidental "taking" of the endangered Stephens' kangaroo rat. Obviously, failure to control burrowing rodents in these large earth fill dams could have led to a catastrophic failure. Adoption of a habitat conservation plan for the endangered rat has finally resolved this problem, but in the interim, many citizens were subjected to unnecessary risk.

- In the mid 1990's, the District was prevented for more than two years from making critical repairs to the Santa Ana River levees, a Federally constructed flood control project owned and operated by the District, because two endangered woolly-star plants were discovered in the general area of the necessary remedial work. The District is mandated to maintain these levees by the Federal government (U.S. Army Corps of Engineers), but could not do so even though a failure would have been catastrophic to the City of Riverside and adjacent communities.

- The Potrero Creek Debris Basin, near San Jacinto, filled to capacity during the Winter of 1994/95. Restoration of capacity was critically needed because of a major fire in the tributary watershed. Permits to excavate the basin were sought from the Corps in July 1995, and the District agreed to provide 2 acres of offsite mitigation, and in addition proposed to set aside 40 acres of the 99-acre debris basin site as a habitat reserve. After consultation with the Service, the Corps requested a survey of the site for the endangered Stephens' Kangaroo Rat (SKR) despite existence of an April 1996 agreement implementing a Habitat Conservation Plan approved by the Service, which specifically provided that maintenance and operation activities were exempt from biological survey requirements. The Service did not accept their error on this issue for more than two weeks. Additionally, the Service demanded that the District conduct focused surveys for the Federally endangered slender-horned spine flower,

> and two other sensitive species, the San Bernardino kangaroo rat and the Los Angeles pocket mouse. Neither the San Bernardino kangaroo rat nor the Los Angeles pocket mouse are Federally listed as endangered or threatened, and surveys should not have been required for these species. In multiple visits to the site, Service staff found no evidence of the spine flower and the District had already proposed avoidance of the only potential area of the site where occupancy was feasible. Eventually, the Service acquiesced to the District's positions, and accepted the proposed mitigation and preservation plan, but the many months of foot dragging by the Service delayed the debris removal project until January of 1997, dangerously late in the rainy season.

Survival of an endangered or threatened species was not at stake in any of the cited cases, but inflexibility built into the ESA, coupled with indifference to public health and safety issues on the part of the Federal resource agency and regulatory staffs, prevented the District from taking appropriate corrective measures in a timely manner unnecessarily jeopardizing lives and property.

NEW PROJECTS AND GENERAL ISSUES

The District has also experienced major difficulties in permitting new flood control projects because of the ESA. This can be illustrated by following the course of attempts to permit the District's proposed San Jacinto River flood control project, near Perris, through the Federal regulatory process. Beginning in 1988, the District entered into 6 years of negotiations with the Service to address concerns they had raised for a potentially endangered plant, the San Jacinto Saltbush. These lengthy negotiations resulted in agreement by the District to add significant environmental enhancements desired by the Service to the project, thus avoiding the need to propose endangered listing of the Saltbush. These enhancements included adding a 100-foot wide riparian corridor for the entire 10 mile length of the project, and providing an additional 250-foot wide corridor of land contiguous to the channel to provide mitigation and protection for the Saltbush and several other plant species of concern to the Service. In order to provide guarantees to the Service and other resource agencies, the Flood Control District, the County of Riverside and the City of Perris executed a Memorandum of Understanding (MOU) with the Service and the California Department of Fish and Game. The MOU provided for development of a habitat corridor plan for the San Jacinto River subject to review and approval by the Service, and a final draft plan was submitted to the Service for consideration and approval in November 1993. It should be emphasized that the MOU and corridor plan were developed voluntarily by local government, working directly with representatives of the Service, specifically to address Service concerns about the San Jacinto Saltbush and other species. In response to this extensive local initiative, the Service inexplicably proposed listing of the Saltbush and three other species as endangered, unilaterally abrogating the MOU. Even under provisions of the existing ESA, the District believes that the Service was obligated to have first considered the local plan proposed to protect the species in question; and second, by any impartial standard to have recognized that implementation of the plan proposed by local government would have obviated the need to list the Saltbush and other species of concern. Since that time, the Service has again changed its position, informally proposing a complete redesign of the project and its mitigation features. Nine years after negotiations began the District is standing by, still waiting for the Service to formalize their proposal. This chain of events speaks for itself with respect to problems with administration of the ESA.

The quality of the Administrative record supporting listing of the Saltbush and the other species, is also an issue. Under the provisions of the ESA, the determination to list a species as endangered or threatened must be based "solely on the basis of the best scientific and commercial data available". Of the total information contained in the Administrative Record for the proposed listing of the San Jacinto Saltbush and the other species involved, only about one-half was even closely related to the listing proposal. And of the remaining material only an insignificant fraction could be considered to be serious scientific data, certainly not enough information to substantiate the need to list the identified species. And most disturbing of all, a comprehensive biological assessment prepared for the District by Tierra Madre Consultants at the direct request of the Service was not even included in the record.

Another problem related to the designation of "critical habitat" proposed by the Service. Under provisions of the ESA, such designation is required to be "on the basis of the best scientific data available". But the Services' proposed boundary line for critical Saltbush habitat followed section and property lines, neither of which have any relationship to biological functions.

Finally, during negotiations for the proposed San Jacinto River project, and beginning in November 1988, the Corps requested on three separate occasions that the Service initiate a Section 7 Consultation under provisions of the ESA. Under current rules, the Service has 90 days to conclude such a consultation, and thereafter has an additional 45 days to provide a biological opinion to the requesting agency. In this case the Service unilaterally terminated the first two consultations, and failed to meet the required deadline for the third consultation. The Service finally issued a biological opinion for the proposed project in March of 1995, more than six years after the initial request.

Major reform of the ESA is necessary to ensure that in the future, Service personnel act in good faith with the public they serve, and to ensure all future listings are based on quality science, are fully justified and in the public interest.

SUMMARY AND RECOMMENDATIONS

Specific reforms to the ESA recommended by the District are as follows:

- **Most importantly, a categorical exemption should be added to provide for routine maintenance and emergency repair of all existing flood control facilities and appurtenant structures which protect the public health and safety, including dams, debris basins, detention basins, open channels and highway drainage structures.**

- **Standards should be established for the quality of the science required to justify a proposed listing, and the science and administrative record should be subject to review and approval by an independent panel of qualified scientists before a proposed listing may be published in the Federal Register.**

- **Criteria should be establish for distinguishing true species from subspecies, and only true species should qualify for listing.**

- **The time period for public comment, and/or for requesting a public hearing, concerning the proposed listing of a species should be increased, and the time periods should be included in the Act itself rather than implementing regulations. It is recommended that the time allotted for public comment be increased to 120 days, and the time allotted to request a public hearing be 90 days. In addition, proposals to list a species should be published prominently in newspapers of broad general circulation.**

- **Early consultation with potentially affected local government, including counties and incorporated cities, should be mandatory before a proposed listing is published in the Federal Register.**

- **Processing and review of permit applications, habitat conservation plans, and Section 7 consultations should be subject to specific time periods for completion, and should be deemed approved if not completed within the allotted time.**

The District fully understands that flood control programs and methods are currently undergoing dramatic change. Softer, non-structural solutions utilizing flood plain management principles are being implemented, rather than the concrete based structural measures used in the past. And where structures are absolutely necessary, they incorporate softer, more environmentally friendly materials and designs where feasible. But millions of citizens still rely on the existing flood control systems which have been constructed to ensure protection of their lives and property. Major reform is necessary to ease the current regulatory burden on local government, and allow maintenance of these existing systems of flood control facilities which provide the backbone of protection for the public's health and safety. Reform of the Endangered Species Act is a critical step in that process.

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CALIFORNIA CATTLEMEN'S ASSOCIATION
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VING THE CATTLE
INDUSTRY SINCE 1917

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TESTIMONY
PRESENTED BY
ROB FROST, 2ND VICE PRESIDENT
CALIFORNIA CATTLEMEN'S ASSOCIATION

BEFORE THE
U.S. HOUSE COMMITTEE ON RESOURCES
RE: H.R. 478
"THE FLOOD PREVENTION & FAMILY PROTECTION ACT OF 1997"
APRIL 10, 1997

MATT ECHEVERRIA
PRESIDENT
LEBEC

JERRY HEMSTED
FIRST VICE PRESIDENT
COTTONWOOD

GORDON RASMUSSEN
TREASURER
PLEASANTON

DAVID WOOD
FEEDER COUNCIL CHAIRMAN
COALINGA

BEEF USA
NATIONAL CATTLEMEN'S BEEF ASSOCIATION

JOHN L. BRAY
EXECUTIVE VICE PRESIDENT
SACRAMENTO

ROB FROST
SECOND VICE PRESIDENT
SANTA PAULA

BILL SANGUINETTI
SECOND VICE PRESIDENT
FARMINGTON

MIKE BENNETT
SECOND VICE PRESIDENT
DUCOR

ROBERT LOFTON
FEEDER COUNCIL VICE CHAIRMAN
CALIPATRIA

Thank you members of the Committee. My name is Rob Frost. I own Frost Farms, a cattle and trucking business in Santa Paula, Ventura County, California. I am currently serving as a Second Vice President of the California Cattlemen's Association (CCA) and am here today representing that organization as well as landowners along the Santa Clara River who have suffered severe flood damage. The CCA is a non-profit organization which has over 3,000 members and has represented the state's beef cattle producers in legislative and regulatory affairs since 1917. Our members own, control or manage approximately 38 million acres of California's 100 million acres. On the land we control, we house a majority of the state's wildlife and plant species and correspondingly the greatest percentage and number of the state's endangered and threatened species which are subject to the Endangered Species Act (ESA).

My testimony today serves to call attention to two issues: 1) The dilemma which I and other landowners along the Santa Clara River have experienced due to the lack of flood control measures to protect public and private property; and 2) the dilemma which ranchers and other landowners throughout California face due to agency permitting requirements that restrict our ability to repair or restore property other than just levees and other flood control projects damaged or destroyed by flooding and other natural disasters. In both cases, the dilemma is the direct result of the federal government's enforcement of the ESA which has taken a severe toll on the ability of landowners to protect their property and their livelihoods in order to minimize or eliminate severe economic losses caused by flooding.

In 1992, 1993, 1994 and some years before, flooding took private land out of agricultural production in Ventura County because government agencies would not maintain the pilot channel in the Santa Clara River. In the flooding during January, 1995 alone, agricultural producers along the river suffered severe economic losses because of the unwillingness of the U.S. Army Corps of Engineers and the U.S. Fish and Wildlife Service to recognize the flood control problems and expedite solutions. Many producers lost hundreds of acres of crops and land - a permanent loss of 20 to 100 feet of soil depth in each case and the irrigation system that went with them due to torrential rains which caused the river to shift course on a four-mile stretch and rip away nearly $2 million worth of crops and land (refer to the Sacramento Bee newspaper article attached to your copy of my testimony). In addition, at least two oil wells and oil lines were at immediate risk, a natural gas line was ruptured and destroyed twice, and utility lines were downed, creating tremendous risk to lives and property.

Those landowners who requested help and had limited financial resources were denied permission to expedite repairs on their property to prevent further flooding and restore what was damaged. Those landowners with adequate financial resources were allowed to take immediate action for restoration efforts but only because they could financially commit to the unreasonable mitigation procedures and demands of the agencies.

For many years, not less than 70, the local flood control agencies contracted out pilot channel excavations to small contractors and owner/operators of earthmoving equipment. Simply put, these contractors and equipment companies maintained a pilot channel in the river so flood waters would stay in the center of the streambed, thus preventing flooding during seasonal heavy rainfall. During the same period, there were numerous sand and gravel mining operations in the river at various locations that served two purposes: To provide an economic advantage for aggregate to be used for roads and highways in the area at a reasonable price and secondly, it removed unwanted silt buildup in the river. Today, because of the agencies' regulatory enforcement under the ESA, Ventura County does not have sufficient quantities of aggregate to economically serve its needs.

We fully support H.R. 478 and commend Congressmen Herger and Pombo for their efforts. However, I would like to briefly describe the second dilemma which ranchers and other landowners face when property is damaged or destroyed by natural disasters and hope that the sponsors of the bill and the committee will at least consider a solution to the problem either through an amendment to H.R. 478 or through some other legislative vehicle. While H.R. 478 is a major step toward bringing relief to people and communities who have been victimized by flooding, we would draw your attention to the fate of other property that can succumb to devastation and is badly in need of ESA and permitting relief. In many cases on private property, ranchers must have the ability to act quickly to repair bridges, culverts and roads that can impair provisions for food, water and safety for livestock; and remove fallen trees and debris from river banks or stream channels which may obstruct water flows and endanger livestock as well as threaten homes and outbuildings. In many other cases, depending on the severity of the flooding or other disaster and the physical characteristics of the land, ranchers are unable to take immediate steps to repair their property. In the case of flooding, landowners may have to wait months for the water to subside before undertaking repair and restoration work. It can cause significant environmental damage and risk to human life for a landowner to prematurely move a bulldozer in to clear streams of unwanted debris or to move soil to replace washed-out roads and streambanks. We would respectfully request that the committee give serious consideration to providing "take" exemptions from penalty under the ESA or other environmental laws for landowners who only seek to replace or restore their property to the state in which it existed immediately prior to a natural disaster and that such exemptions, if applied for by the landowner, have a minimum lifetime of 12 months for those landowners who cannot act immediately due to the elements.

In closing, natural disasters can take a significant financial toll on the investment we have in our businesses, our ranches, our homes. Property owners who have gone through the trauma associated with having their property destroyed and lives disrupted should not be further burdened with expensive permitting and delay processes.

Thank you for this opportunity to testify. I would be happy to answer any questions.

★ ★ The Sacramento Bee • Sunday, January 29, 1995 B5

STATE

River eats land; farmers beg help

Rain-swollen Santa Clara swallows 100 acres, 1,000 citrus trees

Associated Press

SANTA PAULA – Torrential rains this month caused the Santa Clara River to shift course on a four-mile stretch and tear away nearly $2 million worth of crops and land, citrus and avocado growers say.

The growers want help from Ventura County to restore the river to its original route, but county officials say the money just isn't there.

Twenty farmers met in an emergency meeting at week's end, describing losses of about 1,000 orange and lemon trees and an estimated 100 acres of land to the rain-swollen river.

"We are desperate," said grower Randall R. Axell, who lost some 250 orange trees and an acre of property to the river, which flows west across the southern end of the county to the Pacific Ocean.

"If the county helps us we will be able to save our crops and land," he said. "If they don't, we are about to lose everything."

County Supervisor Maggie Kildee told the growers there is not only a tight budget to deal with, but a tangle of a half-dozen government agencies that have a say in river matters.

"I am not here to tell you that we can give you money to take care of the problem," Kildee said. "We will do our best to work with you within the economic constraints that we have."

The county and the growers agree that the answer is to have the Army Corps of Engineers restore the river to its old course and shore up its banks. But officials said that would cost the growers $1 million.

The growers say they can't afford that, and add that getting permission to have the Army Corps of Engineers do the work is difficult.

F.H. Malzacher, a citrus and avocado grower who has 30 acres along the river, estimated he lost $50,000 worth of crops to the flooding.

The rain-swollen river was forced out of its banks, he said, by two islands in the center that turned the water as much as 90 degrees off course.

CALIFORNIA CENTRAL VALLEY
FLOOD CONTROL ASSOCIATION

U S Congress, House of Representatives

Natural Resources Committee Hearing

Thursday, April 10, 1997

Testimony of Robert D. Clark, Manager

Good morning Chairman Young and members of the Committee. My name is Robert Clark and I am manager of the California Central Valley Flood Control Association. Thank you for the opportunity to testify before this committee hearing on H R 478.

The Association was formed in 1926 to promote and secure the integrity of the Sacramento River Flood Control Project. Today we represent the interests of those responsible for the maintenance of the levee and drainage system with membership from throughout the Sacramento Valley and Delta.

Our members include reclamation, levee and drainage districts; counties, one city and private landowners. The importance of the Endangered Species Act is recognized by our members who of course provide considerable habitat for protected species. We want to work with the Congress and Regulatory agencies in an effort to provide for practical and successful implementation of the Act while recognizing the greater need to assure protection of life and property from the ravages of flood. We believe the Act needs to be corrected to recognize the conflicts created by its strict application.

Flood control facilities are safety devices. Here in California our economy, property and lives depend on their successful construction, operation and maintenance. This protection extends to the wildlife and habitat within the leveed system. Yes, levees protect wildlife too. The protection provided wildlife and habitat by levees is never considered when mitigation requirements are developed. A secure flood control system should not be compromised by the misguided desire to enhance fish and wildlife. We strongly believe it is necessary to remove unjustified and unreasonable delay and constraints on levee maintenance and repair from environmental regulation.

Environmental law, regulation and regulators have served to delay, discourage and sometimes prevent essential flood control work, and in almost all cases they reduce significantly the funds available for flood protection. One of the most difficult aspects of compliance with environmental regulation requirements is the constantly narrowing time period when work is permitted to be done. It seems that by the time periods are set aside for nesting, hibernating and migrating species there is inadequate opportunity to accomplish the needed maintenance and repair work in a reasonable and efficient manner. This drastically increases cost and limits the availability of contractors capable of accomplishing the task. **SAFETY FIRST,** not safety second should be our motto!

The California flood of 1986 identified many areas where levee standards were deficient. Many of these sights remain unimproved eleven years later. Such delay in achieving improvement to these facilities while the population and property exposed continues to increase is unacceptable. We have heard these delays categorized as administrative. Environmental law and regulation is the primary cause of these administrative delays.

Most of the environmental aspect of a project is based on biological opinion. The opinions expressed by the several regulatory agencies are often in conflict and resolution of these conflicts delays progress. There is no motivation for any of the regulatory agencies to proceed in a timely manner and personnel changes as well as the ongoing process of new ESA listings and revised biological opinions further add to the delay and rising cost. The actual cost of project implementation is often a fraction of the overall project cost. Funding for construction is not requested or scheduled until all environmental documentation and mitigation is determined.

We can relate to you instances where projects were shut down while in progress for review of endangered species protection. In our opinion these were insignificant advantages as far as providing species protection but resulted in severe impact on the contractor and flood control agencies.

The mitigation for one project right across the river in West Sacramento was also interesting. A failure of a levee bank on the water side due to erosion from flood left the levee bank devoid of vegetation, with nothing but eroding sand from the guardrail to the water. Although there was not any habitat damaged or lost as a result of the repair work, several hundred bushes were required to be planted on the levee berm at a nearby site to compensate for the loss of "potential habitat".

The mitigation costs and delays imposed have readily awakened flood control managers to the need to practice a scorched earth policy in their levee maintenance programs. It is becoming standard practice to maintain levees clean and unencumbered of any vegetation, bushes and trees. Where habitat has been allowed to grow the local agency is at a disadvantage for allowing it.

This strategy is taken reluctantly by the local districts because it is costly and unnecessary for the safety of the levees, but future maintenance and repair requirements may be jeopardized without these actions. With the continuing listing of some of the minute species of plants and invertebrates this strategy might also soon be foiled and the cost of maintenance will skyrocket along with diminished ability to maintain the project.

Flood control managers are good stewards of the environment. They are willing and ready to assist the preservation of habitat and endangered species. Their first priority, however, is providing protection for the lives, property and economy of the area they serve. People who live behind the levees are highly motivated to assure a secure flood control system.

The obstructionist and what appears to be punitive nature of the application of the ESA on vital flood control projects must be overcome. Lacking any achievement of practical reform to the Act in recent years and the current method of application to vital safety projects has led our Association to the support of H R 478. We strongly support the view that operation and maintenance of existing flood control structures should be exempt from requirements under the ESA.

Thank you for your consideration of our members frustrations.

STATEMENT

BY

GEORGE C. GRUGETT

EXECUTIVE VICE PRESIDENT

LOWER MISSISSIPPI VALLEY FLOOD CONTROL ASSOCIATION

Mister Chairman my name is George Grugett and it's my privilege to serve as Executive Vice President of the Lower Mississippi Valley Flood Control Association, an Agency composed mainly of public officials that for the most part are elected to serve the people on Levee Boards, Drainage Districts, Ports and Harbor Commissions, State Agencies, Cities and Towns and all other State Agencies in the States of Illinois, Kentucky, Tennessee, Missouri Arkansas, Mississippi and Louisiana, extending from Hannibal, Missouri to the Gulf of Mexico. These Organizations and Agencies are political subdivisions of the various states in which they are organized and function. We provide an Agency through which the people of the Lower Mississippi Valley may speak and act jointly on all Flood Control, Navigation, Bank stabilization and major Drainage problems. We have appeared before the Congress and served the people in the Lower Mississippi Valley for well over sixty years.

I sincerely appreciate this opportunity to testify today on the implementation of the Endangered Species Act.

Let me begin by stating emphatically that I strongly believe in protecting our environment and everyone I know and associate with shares that belief and desire.

I also strongly believe in private property rights. The rights that form the economic framework that this Country was founded on.

It is my strong opinion that the Multi-Billion-Dollar environmental movement and some bureaucratic Government agencies have harmed our economy and violated the liberties and freedom of the American public.

I am also sure that only the elected Congress of the United States can change this violation of private property rights and prevent Americans from being crushed by fanatical environmental extremists.

My discussion of the implementation of the Endangered Species Act must begin with the long held belief that there is nothing basically wrong with the act itself but the interpretation and enforcement of this act by federal agencies such as the U.S. Fish and Wildlife Service and the Environmental

Protection Agency have created a very costly and unacceptable time consuming situation that is not visible to nor known by the public. This interpretation and enforcement has caused the Federal Government to expend lots of resources, both money and people. Fortunately, because of the generosity of the taxpayers, the Federal Government has these resources.

Unfortunately, the local people do not have the necessary resources and assets therefore work, especially flood control protection, simply does not get done. The time and money required just to file an application for a permit is not available in most cases to the ordinary citizen.

The Federal Government has to expend the time and money because of the rules, regulations and policies that have been promulgated by the Endangered Species Act. The majority of this effort is to satisfy the U.S. Fish and Wildlife Service.

An example of the resources that must be used to both satisfy the mis-interpretation of the Endangered Species Act and provide adequate flood control protection took place on the St. Francis River in East-Central Arkansas.

This reach of the St. Francis River was an integral part of the complex St. Francis Basin Project that provides flood protection for almost two million acres in Northeastern Arkansas and Southeastern Missouri. The project had been jointly built by the local people and the U.S. Army, Corps of Engineers.

In order for the flood control project to function properly maintenance work in the form of dredging to remove accumulated siltation was required on the St. Francis River South of Highway 64 in Arkansas. The Corps of Engineers awarded a contract for the maintenance work in 1977 at an estimated cost of approximately $1 million.

Shortly after work began a dead Mussel, identified as a fat pocket-book pearly Mussel, was discovered near the work-site. Since the fat pocket-book pearly was one of thousands of mussels listed as endangered, work was stopped. The contractor filed a claim against the Government and he was paid approximately $ 1 million, this in spite of the fact that little or no work had been performed. The maintenance work was halted for a period of 11 years and lands and homes were flooded that would not have been if the required work had been done. In addition to this damage the Corps of Engineers spent another $ 1 million locating and relocating fat pocket-book pearly mussels. Two million dollars was expended and no flood control protection was provided.

The epilogue to this story is that work was resumed with individuals being paid to literally crawl on their hands and knees in the path of the dredge removing and relocating Mussels. The irony is that not only was the fat pocket-book pearly Mussel subsequently found in large numbers over a vast area but it was evident that they grew best in a "disturbed" channel, in other words one that had been previously dredged.

There are many stories as ridiculous and costly as the experience with the fat pocket-book pearly Mussel but of even more concern to us at this time is the U.S. Fish and Wildlife Services latest impractical and unsound rules of the designation of critical habitat under the Endangered Species Act.

Just one example of the concern is the U.S. Fish and Wildlife Service proposed designation of a total of 3 million acres, approximately 4,700 square miles, in Louisiana and Mississippi as critical habitat for the conservation of the Louisiana Black Bear. No one wants to see harm come to the Louisiana Black Bear but if almost 5 thousand square miles are designated as critical habitat and the Corps of Engineers' 404 permitting program requires that the issuance of the permit does not result in the adverse modification of critical habitat you can easily see that we and the Corps will be hard-pressed to bring those 300 plus miles of deficit levees in Louisiana and Mississippi to the required grade and section. When those levees fail and they will if not corrected, not only will the Louisiana Black Bear be in immediate and critical danger but so will about 4 million people and their homes and property.

I must point out that this designation of critical habitat also has the strong potential for imposing undue restrictions on the activities of private landowners.

Let me briefly comment on HR 478 that proposes certain exemptions from the Endangered Species Act for flood control projects. We do not believe that flood control projects in their entirety should be exempted from the requirements of the Endangered Species Act as the act itself has made positive contributions to our quality of life in the United States. What we are really asking for is tolerance for people and their livelihood under the implementing rules of the act. The Endangered Species Act, because of the way it is formulated, requires the U.S. Fish and Wildlife Service give total weight to the conservation of the species regardless of the consequences to people, their property and their livelihoods. The act should be modified to reflect a balance, the weighing of people's needs against that of the species.

We hope that the Congress will modify the Endangered Species Act to bring about that balance.

Thank you for this opportunity.

TESTIMONY OF JOHN GARAMENDI, DEPUTY SECRETARY, DEPARTMENT OF THE INTERIOR, BEFORE THE HOUSE RESOURCES COMMITTEE, REGARDING THE RECENT FLOODS, HR 478, AND IMPLEMENTATION OF THE ENDANGERED SPECIES ACT.

APRIL 10, 1997

Mr. Chairman, I appreciate the opportunity to be here today to discuss the recent and tragic flooding which has taken place in California, the Northwest, the Midwest and other parts of the country. Our hearts go out to those that have suffered losses from this series of devastating floods. I am accompanied today by Mr. Wayne White, the Sacramento Field Supervisor for the Fish and Wildlife Service.

EMERGENCY RESPONSE

First, let me commend the U.S. Army Corps of Engineers (USACE), U.S. Bureau of Reclamation (USBR), U.S. Geological Survey (USGS), Fish and Wildlife Service (FWS), and other state, local, and federal flood fighting agencies. While the extent of this year's flood was catastrophic, our agencies performed effectively and avoided serious additional damages and threats to life that certainly would have occurred.

The Department of the Interior, as part of a coordinated federal effort, has taken all measures necessary to expedite disaster response actions. The Bureau of Reclamation, through effective operation of the Central Valley Project reservoir system managed the flow of water and avoided further catastrophes on the American, Sacramento, Stanislaus, and San Joaquin rivers. The USGS provided "real time" stream flow readings that allowed project operators and emergency response officials to constantly fine-tune dam releases and other emergency measures.

The FWS also played a crucial role in our disaster response efforts. In January 1997, FWS implemented the disaster provisions of the Endangered Species Act Section 7 consultation regulations for the 48 California counties that were declared disaster areas in order to facilitate rapid and effective response to damaged flood management systems that minimize the risks to life and property. These provisions allow disaster response measures to be implemented immediately in the face of flooding without prior consultation.

In addition, on February 19, 1997, the Director of the Fish and Wildlife Service issued a policy statement further clarifying and articulating our flood emergency policy under the ESA. The purpose of the policy statement was to provide clear guidance to Service personnel, to address the concerns expressed by disaster response agencies and local residents, and to reiterate that fish and wildlife conservation efforts would not hinder emergency flood response actions necessary to protect human lives and property. A copy of that policy has been provided to the Committee and is attached to this testimony.

The policy statement outlines the procedures that Service personnel will follow when evaluating the impacts from short-term repair of flood control facilities. Essentially, repair and replacement of flood-damaged flood control facilities may proceed unimpeded and without review as long as landowners and government agencies plan to repair or replace the damaged facilities to substantially the same condition as existed before the flood. If significant adverse impacts to listed species have occurred or are occurring as the result of emergency actions, the Service will work with the agencies to minimize or mitigate for these impacts after the emergency is over.

LONG-TERM RESTORATION OF THE SYSTEM

Currently, we are engaged in flood response efforts throughout the affected States. In keeping with the Administration's February 18, 1997 floodplain management guidance, we are working closely with the Army Corps of Engineers, FEMA, and State agencies to respond to the needs of affected landowners, businesses, and water management districts. We are providing personnel to the Corps Emergency Response Team and offering technical assistance wherever possible to minimize the long-term environmental impacts from levee repair and reconstruction. These efforts will continue throughout the flood season. In the wake of natural disasters, we routinely work closely with FEMA, the Corps, and other Federal and State relief agencies to ensure fish and wildlife conservation efforts do not hinder emergency response actions.

While floods cannot be prevented, their damages can be reduced or eliminated with proper planning. Preservation and restoration of habitat is compatible with and can support the goals of floodplain management.

The Department's long-term floodplain management strategy is to develop cost-effective and economically sustainable approaches to reducing future flood damages that are consistent with the need to protect and restore important environmental and natural resource values that are inherent to the floodplain and adjacent lands. We will continue to work cooperatively with Federal and State agencies, local communities, water management districts, and concerned citizens to examine long-term flood damage reduction measures. Our hope is to achieve a flood control system that is based on reducing flood damages through cost-effective, and where appropriate, non-structural alternatives, while minimizing development in the floodplain.

ESA REGULATIONS AND FLOOD PROTECTION MEASURES

I will now turn my comments to the Department of the Interior's role in implementing the Endangered Species Act and its interaction with the maintenance, repair and operation of flood control projects.

The Endangered Species Act has been wrongly blamed for flood damages in California, particularly related to operation and maintenance of the levee system along the Sacramento and San Joaquin Rivers.

The storm that hit northern California beginning just after Christmas paralleled or exceeded the historic California storms of the 20th century. For example, flooding on the San Joaquin River ranked four times greater than in 1986. Oroville Reservoir on the Feather River experienced a record inflow of 302,000 cfs, a 120 year event, with outflows twenty percent greater than the previous record in 1986. The Mokelumne peaked at close to 8,000cfs, which is the highest flow recorded in over eighty years. The Cosumnes River experienced flows over 90,000cfs, twice as high as any recorded flows since before 1906. Clearly, the levee systems were simply overwhelmed by the magnitude of last January's flood.

In addition, we are aware of no case where it can be shown that implementation of the Endangered Species Act caused any flood control structures to fail. Nor has the presence of any listed species prevented the proper operation and maintenance of flood control facilities prior to the recent floods.

INTERIOR COMMENTS ON H.R. 478

I would like to take this opportunity to express the Department's strong opposition to the Flood Prevention and Family Protection Act of 1997, H.R. 478. This legislation would exempt Federal and non-Federal flood control projects from section 7(a) and section 9(a) of the Endangered Species Act. The stated purpose of the legislation is to improve the ability of local, State, and Federal agencies and individuals to comply with the ESA in building, operating, and maintaining flood control projects. While the Department agrees with the need to reduce flood damages and to protect residents living in flood prone areas, we do not believe this legislation will achieve these goals. In fact, H.R. 478 has the potential to worsen the problems it seeks to address.

H.R. 478 proposes broad exemptions from the ESA which could encompass a majority of Federal and non-Federal water resource projects. Consultation under section 7 would not be required for any agency action that consists of construction, operation, maintenance, or repair of a Federal or non-Federal flood control project, facility, or structure related to both emergency actions and routine maintenance. In addition, these actions would not constitute a "taking" of any listed species under section 9(a). There are thousands of Federal and non-Federal projects that have flood control as one of their functions. Prominent examples include the Hoover, Grand Coulee, and Shasta dams. In addition, any non-Federal hydropower facility licensed by the Federal Energy Regulatory Commission may have flood control benefits associated with its generating capacity. These projects could fall under this exemption. In the event that conditions change after a license has been issued, particularly those related to water releases and in-stream flows, we would not under this legislation be able to reinitiate consultation. We believe this bill could exempt virtually all Federal and non-Federal water resource projects from compliance with section 7(a) and section 9(a).

Amending the ESA in this fashion will not enhance anyone's ability to operate or maintain flood control facilities. Review of our procedures indicates that implementation of the ESA, particularly section 7, did not contribute to flooding nor did it result in significant delays in construction or proper maintenance of flood-control facilities. Our actions have been, and continue to be, focused on protecting trust resources without endangering lives or property.

The assumption that floods can be prevented solely by structural means has allowed businesses and residents to live and work in areas that are subject to frequent flooding. As a result, some communities have become immune to the small to medium-sized floods only to be devastated by the larger, more intense floods that inevitably occur. H.R. 478 will contribute to a false sense of security and may encourage further development in flood-prone areas, thereby increasing future flood damages. It will not solve the problem of flooding, flood damages, and lost lives and property. In fact, it could make the problems worse. It is dangerous to assume, as the title suggests, that floods will be prevented and families will be protected by this legislation. Rather, this bill could do just the opposite by assuming that all floods can, somehow, be prevented with structural measures.

Although the Department is responsible for conserving fish and wildlife resources, we understand the need for timely repair and maintenance of flood control facilities. We recognize the value of these flood control facilities in protecting lives and property and that without them, even minor floods could result in major damage. The Corps of Engineers, the California Department of Water Resources, and the Water Management Districts throughout the state have done an exemplary job of constructing, operating, and maintaining the current flood control facilities, particularly the levee system. We have worked cooperatively with these agencies for years to ensure fish and wildlife conservation efforts are effectively integrated into levee operation and maintenance.

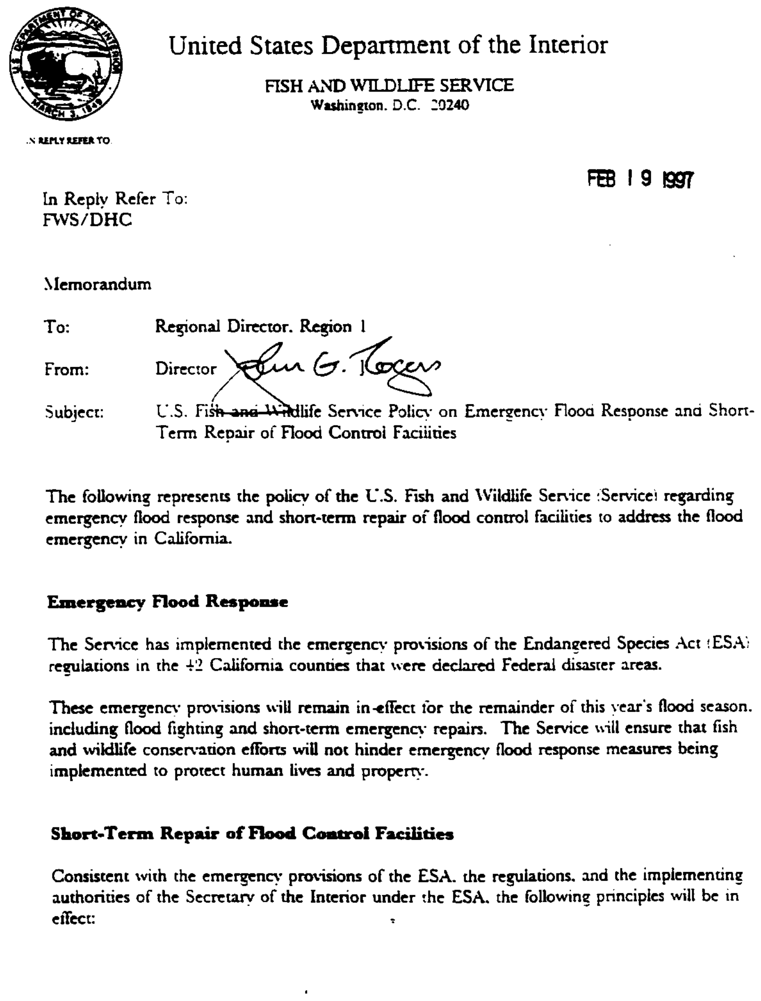
We also recognize that several endangered species inhabit the levee system along the Sacramento and San Joaquin Rivers. Therefore, we have developed cooperative agreements with the Federal and State agencies and the Water Management Districts to reconcile the needs of the listed species with the need to maintain flood protection capabilities. For example, in 1995, we conducted a programmatic consultation for FEMA-funded levee projects to cover the effects on the giant garter snake, a threatened species. The consultation covered 11 counties and was developed to expedite levee repair. Actions covered include a wide variety of activities necessary to maintain the structural integrity of the levees, including clearing of vegetation. Because we developed an agreement that avoided the impacts to listed species, no compensatory mitigation was required.

We have also conducted a programmatic consultation to address impacts to the Valley Long-Horned Elderberry Beetle. This involves avoiding and minimizing the impacts to the species along with some compensatory mitigation for unavoidable losses. Compensatory mitigation usually involves transplanting elderberry shrubs and planting additional stems to allow new growth. These measures have been implemented with no significant delays in operations and maintenance of the levee systems.

The Department is committed to developing forward-looking conservation agreements to ensure resource management conflicts are kept to a minimum. It is in no one's interest to wait for problems to occur.

CONCLUSION

In closing, we know this will not be the last natural disaster that will affect lives and property. Therefore, we are committed to continually improving our capability to respond to the needs of affected communities, businesses, and local residents before, during and after natural disasters of all types. We look forward to working with the Committee to improve Federal response to disasters such as the devastating California floods. Thank you for this opportunity and I welcome any questions you may have.



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Washington, D.C. 20240

N REPLY REFER TO

FEB 19 1997

In Reply Refer To:
FWS/DHC

Memorandum

To: Regional Director, Region 1

From: Director John G. Rogers

Subject: U.S. Fish and Wildlife Service Policy on Emergency Flood Response and Short-Term Repair of Flood Control Facilities

The following represents the policy of the U.S. Fish and Wildlife Service (Service) regarding emergency flood response and short-term repair of flood control facilities to address the flood emergency in California.

Emergency Flood Response

The Service has implemented the emergency provisions of the Endangered Species Act (ESA) regulations in the 42 California counties that were declared Federal disaster areas.

These emergency provisions will remain in effect for the remainder of this year's flood season, including flood fighting and short-term emergency repairs. The Service will ensure that fish and wildlife conservation efforts will not hinder emergency flood response measures being implemented to protect human lives and property.

Short-Term Repair of Flood Control Facilities

Consistent with the emergency provisions of the ESA, the regulations, and the implementing authorities of the Secretary of the Interior under the ESA, the following principles will be in effect:

(a) Any repair or replacement of a facility that serves a public purpose and is necessary to prevent the recurrence of such a natural disaster and to reduce the potential loss of human life may proceed unimpeded as long as the damaged facilities are repaired or replaced to substantially the same conditions as existed before the flood.

(b) Following the completion of this year's flood season. Federal agencies are expected to submit information on the nature of the actions that were taken, consistent with the Services' existing emergency regulations. The Service will work with the agencies to assist them in completing their consultation responsibilities in an expedited manner.

(c) When requested, the Service will work with the appropriate agencies to reduce potential impacts to fish and wildlife resources, including listed species. If significant adverse impacts to listed species have occurred or are occurring as the result of emergency actions, the Service will work with the agencies to minimize or mitigate for these impacts.

Questions and answers regarding the Service's Policy on Emergency Flood Response and Short-Term Repair of Flood Control Facilities

Q. Can government agencies and landowners take actions to repair their levees and other flood control structures without the Service taking regulatory action?

A. Yes. For flood fighting and short-term levee repair that is needed to save lives and property, landowners can repair damaged facilities that serve a public purpose to prevent the recurrence of the disaster as long as the damaged facilities are repaired or replaced to substantially the same conditions as existed before the flood.

Q. Will the Service require consultation and mitigation before repairs are initiated if landowners and government agencies plan to rebuild their flood control structures to substantially the same conditions as existed before the flood?

A. No. Flood control structures can be reconstructed to substantially the same conditions as existed before the flood without prior review by the Service.

Q. What does "substantially the same conditions" mean?

A. This means restoring the structure to the conditions that existed prior to the flood. It does not require exact duplication of pre-flood conditions; however, the level of flood protection and the area affected by the structure should be approximately the same. Increasing the level of flood protection from the previous condition (e.g., increasing the levee heights) would constitute a substantial modification.

Q. Does this mean that flood control structures cannot be reconstructed unless they are built to the same specifications as existed before the flood?

A. No. This does not mean that flood control structures cannot be improved or upgraded from existing conditions. If the project sponsor determines that a flood control structure must be improved or upgraded from what existed prior to the flood, the applicable provisions of the Endangered Species Act and other regulatory authorities will be applied on a case-by-case basis. In evaluating substantial modification of flood control structures, the Service will review the proposed actions, evaluate the impacts, and conduct section 7 consultation in an expedited manner, if necessary. This determination will be made using sound biological judgement and with an awareness of the emergency actions required during the flood.

Q. Will the Service require after-the-fact compensatory mitigation for levee repairs?

A. When requested, the Service will work with the appropriate agencies to reduce potential impacts to fish and wildlife resources, including listed species. If significant adverse impacts to listed species have occurred, or are occurring as the result of emergency actions, the Service will work with the agencies to minimize or mitigate for these impacts.

Q. How much mitigation is going to be requested if flood control measures are upgraded from pre-flood conditions?

A. The Service will evaluate the post-flood conditions on a case-by-case basis to evaluate the current conditions and determine what impacts may have occurred, or are expected to occur, with the upgraded flood control structures. Under these circumstances, the level of impacts to protected species would determine the actions required.

Q. What will be the long-term response to flood recovery and flood damage reduction once the floods have subsided?

A. The overall goal of the Federal government is to achieve a rapid and effective response to damaged flood and floodplain management systems that will minimize the risks to life and property, while ensuring a cost-effective approach to flood damage mitigation and floodplain management and the protection of important environmental and natural resource values that are inherent to the floodplain and adjacent lands. The U.S. Fish and Wildlife Service fully supports these goals and will work cooperatively with other Federal and State agencies, local communities, and concerned citizens to implement long-term flood damage reduction measures.

NEWS RELEASE

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IDAHO-NEVADA-CALIFORNIA-WASHINGTON-OREGON-
HAWAII AND THE PACIFIC ISLANDS

U.S. FISH AND WILDLIFE SERVICE ISSUES EMERGENCY FLOOD RESPONSE POLICY

The Interior Department's U.S. Fish and Wildlife Service today issued a policy statement addressing how the agency will respond to the California flood emergency, protect human lives and property, and address endangered species conservation.

The Service's policy was announced by Deputy Interior Secretary John Garamendi at a February 20 meeting on flood recovery sponsored by Senator Dianne Feinstein in Sacramento, California.

"Fish and wildlife conservation efforts will not hinder emergency flood response measures," Garamendi said. "This policy statement provides clear guidance to address the concerns expressed by disaster response agencies and local residents."

The 1973 Endangered Species Act contains emergency provisions that allow for replacement and repair of public facilities in Presidentially declared disaster areas. The Service's policy statement clarifies how the agency is implementing these emergency provisions in the 42 California counties that have been declared Federal disaster areas.

The policy will remain in effect for the remainder of this year's flood season. It states that for flood-fighting and short-term levee repairs needed to save lives and property, landowners can go ahead with repairs that restore the flood control structures to "substantially the same condition" as existed before the flood without prior review by the Fish and Wildlife Service.

"Substantially the same" means that the level of flood protection and the area affected by the structure should be approximately the same as before the flood. Increasing the level of flood protection, such as by increasing the levee heights, would be a substantial modification that would require Service review.

(more)

If flood control structures need to be improved or upgraded from what existed before the flood, the Fish and Wildlife Service will conduct an expedited review on a case-by-case basis.

After repairs have occurred, the Service will work with appropriate agencies upon request to reduce potential impacts to fish and wildlife. If there are significant adverse impacts to listed species as a result of emergency actions, the Service will work with the agencies to minimize or mitigate these impacts.

The Fish and Wildlife policy announcement follows the issuance of guidance to all relevant agencies by the White House on February 18 to "achieve a rapid and effective response to damaged flood and floodplain management systems that will minimize risk to life and property, while ensuring a cost-effective approach to flood damage mitigation and floodplain management and the protection of important environmental and natural resource values that are inherent to the floodplain and adjacent lands."

--30--

Refer: Jana Prewitt, Washington, D.C. - 202 208-6291

For Release: 1 p.m. PST, February 20, 1997

DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY OF THE ARMY
(CIVIL WORKS)

WRITTEN STATEMENT OF MICHAEL L. DAVIS
DEPUTY ASSISTANT SECRETARY OF THE ARMY FOR CIVIL WORKS

ON FLOOD PROTECTION ACTIVITIES AND
IMPLEMENTATION OF THE ENDANGERED SPECIES ACT

BEFORE THE

COMMITTEE ON RESOURCES
UNITED STATES HOUSE OF REPRESENTATIVES
THURSDAY, APRIL 10, 1997, 12 NOON
1324 LONGWORTH HOB
WASHINGTON, D.C.

Mr. Chairman and Members of the Committee: Thank you for the opportunity to testify on the impact of the Endangered Species Act (ESA) on the ability of federal, state, and local governments to provide flood protection. I am Michael L. Davis, Deputy Assistant Secretary of the Army for Civil Works. With me today from the Army Corps of Engineers Sacramento District are Ms. Susan L. Ramos, Chief of the Environmental Branch; Mr. Michael F. Nolan, Chief, Civil Branch Programs and Project Management; and Mr. Thomas S. Coe, Regulatory Branch. They are here at the request of the Committee to answer specific questions on the flood control projects within the Sacramento District.

INTRODUCTION

While my statement today focuses on activities in the California Central Valley and its recent devastating floods, the basic tools used by the Army Corps of Engineers apply across the Nation. Further, we believe that the recent California experience is illustrative of the solid working relationships between federal, state, and local agencies and local flood control project sponsors in other flood prone areas.

Let me say up-front that we believe that implementation of the ESA is not inconsistent with the need to build, maintain, and operate flood control infrastructure. We know today that it is not only vital to protect human safety and property -- it is also important to protect our natural resources. Using existing tools and regulatory provisions of the ESA and the Clean Water Act (CWA) we are able to maintain the important balance between flood protection and natural resource protection.

CALIFORNIA CENTRAL VALLEY ISSUES

Before I discuss our views on the impact of ESA and other environmental programs on our flood protection efforts, I would like to review some basic information on the Central Valley flood protection infrastructure. First, it is important to note that the Corps is responsible for only some of the 6,000 miles of levees in the Central Valley. Approximately 1700 miles of levees are considered federal, or "project", levees. These are levees built by the Corps and locally operated and maintained, as well as those locally-constructed levees incorporated by Act of Congress as "federal" levees, which are also locally operated and maintained. In addition, there are approximately 400 miles of "active" non-federal levees. These are locally constructed, locally maintained levees that, under the Corps Rehabilitation and Inspection Program of PL 84-99, have been inspected by the Corps and found to meet engineering and maintenance standards set by the Corps for non-federal levees. The Corps can repair only federal levees and active non-federal levees under PL 84-99 authority.

The remaining 3900 miles of levees in the Central Valley are classified as "inactive" by the Corps. This means that these locally constructed levees either do not meet minimal engineering and maintenance standards, or do not have a local sponsor, or have not been inspected by the Corps. (Every non-federal levee, regardless of its condition, must be inspected by the Corps and granted an active status before it can become eligible for rehabilitation assistance. The inspection must occur prior to any damage caused by a flood event.) The Corps cannot repair inactive levees under PL 84-99 authority.

Corps activities apply mainly to the 1700 miles of federal "project" levees and the 400 miles of "active" non-federal levees in the Central Valley. Maintenance and repair of the 3900 miles of private levees may require a Department of the Army (DA) permit under Section 404 of the Clean Water Act and/or under Section 10 of the Rivers and Harbors Act of 1899. However, it is important to understand that most levee maintenance, repair and rehabilitation of currently serviceable structures, including levees in "non navigable" waters are exempted from regulation under the terms of CWA Section 404 (f)(1). For levee maintenance and repairs in navigable waters, a DA Section 10 permit is required. To accelerate the permitting process in these waters, a nationwide general permit has been issued by the Corps for such work. The nationwide general permit allows levees to be maintained to PL 84-99 standards with little or no review by the Corps. As a condition of the general permit the proposed work must comply with the ESA. If the work may affect threatened or endangered species, some form of informal or formal consultation with the U.S. Fish and Wildlife Service (USFWS) is required.

To provide additional regulatory relief, the Sacramento District issued a regional general permit (RGP) in early January, 1997, for emergency flood repair. The permit is for activities not otherwise covered by existing exemptions or nationwide general permits. The use of the RGP in conjunction with existing nationwide general permits and exemptions allowed the District to give very rapid authorization for emergency flood related work. Since January, the District has evaluated and authorized over 30 separate activities under the general permit with turn around times ranging from two hours to two days.

The Corps of Engineers complies with the Endangered Species Act in all of its activities, including emergency actions and regulatory activities under the Clean Water Act. Under normal circumstances, the Corps requests from the USFWS, or the National Marine Fisheries Service (NMFS) where applicable, a list of threatened or endangered species that may be in the study or project area. If a species may be present in the area, the Corps completes a biological assessment (where that would be appropriate) to see if the species would be adversely affected. If there would be an adverse effect, the Corps requests informal or formal consultation with the Service to develop means to avoid such effects. In the case of emergency actions, the Corps contacts the Service early in the emergency to begin dialogue on ways to avoid adversely affecting any threatened or endangered species.

The Corps enjoys a solid working relationship with federal and state resource agencies. We work together to ensure that flood control projects go forward in a timely manner with minimal adverse effects on the environment. Where the adverse effects need to be addressed, we work together to establish the appropriate mitigation.

A good example of this effective working relationship is the emergency flood fighting work that was done following the New Year's storm in northern and central California. As soon as our local Sacramento District became involved with fighting levee breaks, our environmental resource representatives coordinated with USFWS, NMFS, and the State of California Department of Fish and Game to obtain guidance on conducting consultations on endangered species concerns. All three agencies stated that an initial consultation was not necessary to initiate emergency levee repairs during flood fight conditions. Instead, concerns or requirements for endangered species mitigation would be addressed once the flood fighting ended. The Corps representatives kept the agencies informed of construction activities during this period. Emergency work went forward without any delays for environmental consultation. Any formal consultation is being done later because the need for immediate repairs was realized by all.

And now that the Corps is in the rehabilitation phase of levee reconstruction in California, the USFWS is working with our Sacramento District in close coordination on environmental issues, so that we may expedite the site evaluation process and, ultimately, the final levee rehabilitation. The USFWS and State Fish and Game representatives accompany the Corps teams as they conduct site visits. A determination is made on-site of any ESA, National Environmental Policy Act, or California Environmental Quality Act concerns or habitat mitigation requirements. After the Corps and the USFWS have determined what mitigation measures can be reasonably and practicably implemented to protect endangered and threatened species and other environmental values, those measures are implemented as the rehabilitation and reconstruction work proceed, or as soon thereafter as is practicable.

The Corps is also involved in long-term and joint efforts with our resource agency counterparts to offer more effective flood protection in a manner that will complement efforts to improve protection of the environment. As established by a February 18, 1997, memorandum from the Office of Management and Budget and the President's Council on Environmental Quality, the Corps is the lead federal agency of an Interagency Task Force that will seek nonstructural alternatives for flood protection when it make sense to do so. This task force, which is represented by many agencies, will look to restore California's flood protection in a way that will minimize risk to life and property, while protecting important environmental and natural resource values. In creating the Task Force the Administration recognized the need and value associated with combining flood protection solutions and environmental considerations so that both objectives can be met simultaneously. Only through a partnership between the Corps, other agencies, and state and local communities will long-term sustainable solutions be developed and implemented.

The Interagency Task Force is working with federal, state and local agencies to identify potential nonstructural alternatives to the repair of damaged flood control facilities for the purpose of reducing future flood damages. We recognize that nonstructural alternatives are not a "silver bullet" solution and that such approaches require extensive coordination and agreement from landowners. I am pleased to say that the field staff from both the Corps and the resource agencies are working closely with others to build the consensus that is imperative in implementing such a solution, and that some potential nonstructural measures have been identified.

The Corps is involved in other long-term interagency efforts such as the CALFED Bay-Delta Program, where the State of California and federal interests have formed a partnership to protect both the people and the natural environment of the California delta region. Relationships such as CALFED illustrate the importance the Corps places on getting the views and expertise of a diverse group when developing flood protection and environmental projects. The Corps will coordinate closely with CALFED to develop long term flood control practices that are consistent with the CALFED Bay-Delta long term program. For example, the California Department of Water Resources is being funded by Category III of CALFED to be the Corps non-federal sponsor for Prospect Island. The implementation of Prospect Island will restore 1300 acres of freshwater tidal marsh, riparian, and shallow open water habitat in the Delta.

It is our strong belief that both human needs and our natural environment can both be given appropriate consideration and that decisions regarding flood protection and development issues should reflect both sets of considerations. The Corps recognizes that environmental laws such as the ESA and CWA section 404 are essential to ensure the protection of our nation's resources. While it is true that, at times, construction schedules and practices have been modified to address environmental requirements, but this has not interfered with our ability to provide protection from floods. We continue to work with other agencies to reduce delays where possible.

H.R. 478

Chairman Young's letter of invitation asked for comments on H.R. 478, 105th Congress. The Department of the Army strongly opposes H.R. 478. The Department does not believe that H.R. 478 is necessary to allow us to deal with flood protection or flood emergencies. H.R. 478 would exempt from ESA Section 7 consultation and from ESA Section 9 "takings" provisions a great variety of activities related to flood control structures and response actions. Some of those activities do not deal with emergencies, so generally there is time to ensure reasonable and sensible compliance with the mandates of the ESA for those activities. Thus, we do not believe that exemptions such as H.R. 478 would enact are necessary for those non-emergency activities. Other activities addressed by H.R. 478 are related to emergency flood response. As previously explained, we already have and use emergency procedures to deal with ESA and other environmental requirements during flood emergency response actions. Our approach allows work to go forward as needed while taking into consideration substantial environmental impacts. H.R. 478 would not allow for this type of evaluation, and is not needed to address emergency situations.

CONCLUSION

The recent floods in the Northwest, central California, and the Ohio Valley have caused substantial damage to property, have cost taxpayers billions of dollars, and most importantly, have cost human lives. No agency is more sensitive to this devastation than the Corps of Engineers. Our dedicated field staff witness firsthand the destruction and the fears of landowners. It is time that we seriously reexamine our flood plains and our floodplain policies. We must ask if our current approach is sustainable -- in terms of effective flood protection, the fiscal investment, and the impact on our natural resources. Our short-term objective must be to help communities recover from the devastation. Our long-term objective must, in our opinion, be one that includes a serious look at all options -- not just an automatic return to structural solutions that may no longer be appropriate or effective. If we carefully evaluate all our options, we can demonstrate that we do not have to choose between flood protection and environmental protection.

Mr. Chairman, that concludes my testimony. Ms. Ramos, Mr. Nolan and I are prepared to answer any questions you may have.

U. S. House of Representatives

Committee on Resources

H.R. 478

APRIL 10, 1997

Presented by

Michael C. Rausch
Treasurer

UPPER MISSISSIPPI, ILLINOIS & MISSOURI
RIVERS ASSOCIATION

616 N. 4TH STREET
QUINCY, IL 62301

Committee on Resources

H.R. 478

Mr. Chairman and members of the Committee, my name is Michael Rausch. I serve as Treasurer of the Upper Mississippi, Illinois & Missouri Rivers Association. This testimony is presented on behalf of our Association in the absence of our Chairman who is unable to attend due to being called to jury duty.

The Association was formed in 1954 and been expanding since "The Great Flood of 1993". Our membership includes several disciplines which are all interested in the continuing improvement of flood control, navigation, economic development, and habitat protection along the navigable rivers of the Midwest.

The Upper Mississippi, Illinois, and Missouri River valleys are among the most productive areas of the World. (See Attachment 1, Soybean acreage by State, indicating importance of area for world trade and balance of payments). The navigable waterways are strategically located, almost perfectly configured, and the envy of our World trading partners.

The United States Army Corps of Engineers has transformed these great natural resources into the essential centerpiece of our Midwest economy. Water borne commerce has been utilized since the first canoes and flatboats carried their passengers and freight up and down the river (See Attachment 2, Upper Mississippi River-Illinois Waterway System Navigation Study).

In the 1930's the navigation system was modernized and our great transportation infrastructure advantage was established. Today, however, that infrastructure advantage is slipping and our state of the art system is in imminent danger of being inferior to numerous areas of South America. In other words it is fast becoming an antique.

Those in the Midwest who provide the labor, management, and capital to keep our economic engine running have been pleading for improvements to accommodate increasing World trade. Many environmental interest groups have been lobbying to block those efforts or any other improvement in flood control systems.

Federal and State biologists continually lament that because of flood control and navigation, the Upper Mississippi, Illinois and Missouri Rivers are on the verge of an "ecological collapse". We do not agree. We must be reminded that these interests have cried "wolf" on previous occasions regarding fears that did not materialize.

In early April each year, America's largest Amateur Bass Tournament is held at Quincy, Illinois on the Mississippi River. Numerous other fishing events are held annually throughout the area. It does not appear that the area is an environmental black hole.

Some of the most sought after hunting and fishing areas along our major Midwest rivers are in the Levee & Drainage Districts. These protected areas produce more wildlife than many governmentally developed Wildlife Refuges. Why? Food is produced in the farmed and protected areas. The preserves do not provide equivalent habitat unless there are protected areas devoted to production agriculture to provide the food sources for survival. It is therefore inconsistent that flood control projects for the Fish and Wildlife Service receive benefits for habitat in the cost/benefit analysis, but the Levee Districts do not.

The Midwest economy and environment can prosper together. This will not occur if a proper balance and consideration for flood control, economic development and recreation is not quickly implemented.

Following the 1993 flood, great areas of hardwood groves were killed. Wildlife customarily in the affected areas were killed or escaped. Today, four years later, the trees have not returned. The wildlife is returning but slowly in some areas. The instability of a poorly maintained flood control system prevents economic growth, and stable recreation, while causing erratic food production and less efficient navigation systems.

The greatest threat to river transportation, fishing and recreation is the accumulation of sand along the side channels and the backwaters of the rivers. In areas, the main navigation channel is narrowing. The Corps, during the past 35 years, has seldom removed maintenance dredge material from the floodway in the Upper Valley. The material when dredged from the navigation channel, has been placed within the floodway on islands, beaches or in deep water. The Midwest's rivers are continuing to fill with sand and sediment.

Efforts to remedy this problem of sedimentation and simultaneously solve the problems for flood control, navigation and recreation are being delayed and prevented by those who wish to turn this great resource into a quasi-national park. All of the confusion, delaying techniques, misinformation and misdirection are creating delays while the rivers are filling with sand, more islands are being created with natural trees and tax dollar planted trees. Government programs are even funding placement of millions of tons of rock in the rivers, and building structures and islands in the river. The floodway and navigation channels are being filled in. Current action and inaction is increasing the risk of flooding and increasing the inefficiencies of navigation.

In the meantime, if a city, industry, or community wants to improve their economic base by improving flood control, the idea is declared economically impossible by current cost/benefit formulas or environmentally damaging.

All along the navigable rivers the land elevation between the levees is rising as the floodway fills with sand and sediment. Rather than acknowledge the sedimentation and lack of maintenance, some label the situation along the Illinois River as one in which the riverbed is rising.

We do not really know the full impact of the Endangered Species Act on the ability of the federal, state, and local governments to provide adequate flood control protection. We do know that the fear of the Act and the related costs and delays associated with "environmental issues" rising under the veil of the Act have caused serious delay, inaction, threats of high cost and less than effective or inefficient answers to most flood control activities in our area.

Federal officials have stated they are not handcuffed by the Act. However they are unable to undertake previously normal activities due to concerns with or threats from interest groups using the Act.

Maintenance of levees has been prevented or delayed due to alleged critical habitat of the Indiana bat. Dredging to repair levees had to be moved due to concerns for mussel beds, and the Higgins eye clam. Barges have had difficulty tying to bank areas due to concern that eagles would be frightened. In fact eagles will roost on concrete trees, and stay near bridges and other man made apparatus. Our members have been prevented from improving the approach areas to levees for maintenance because removing trees may remove habitat. Approaches to levees could not be cleared for maintenance in other areas due to classification of man made barrow pits as wetlands. During the 1993 flood, levees that had been topped flooding the drainage district could not be intentionally breached to let water out until Federal and State agencies were satisfied that habitat and historical surveys were completed. This extreme delay caused much additional damage to the particular district.

The 1993 flood killed pecan groves in a flooded drainage district on the Illinois River. The local Soil Conservation Service office approved removal and replanting of the trees in October 1994. In January 1995 the COE notified the owner his actions might require a Section 404 permit. One week later the COE issued a cease and desist order threatening a $75,000 per day fine and possible imprisonment for his actions, and requiring him to restore the area to its previous condition. After one and one/half years of red tape effort a Section 404 permit finally allowed restoration work, but nearly was denied because of concern regarding the endangered Indiana Bat. This was the official action even though the COE personal indicated there had never been a bat sighted in the area. It was stated that there was a possibility that one could stray into the dead Pecan grove. The March 1996 granting of the Section 404 permit was subject to two pages of conditions (Attachment 3), including the restriction against doing any work between May 1 and September 1(the best, most cost effective time to do this type of work) to protect these non-existent Indiana Bats.

In another case, beaver dams obstructed a small tributary floodway to the Illinois River. It is still 8 months and the work is being prevented.

The United States Army Corps of Engineers is facing the issue of altering the water flows of the Missouri River in part to accommodate the presumed needs of the Piping Plover, the Lesser Tern and the Pallid Sturgeon. This is totally influenced by the Endangered Species Act concern, and, I might add, with very little concern about the communities, businesses and property owners on the downstream reaches of the river. Attachment 4 suggests the lack of balance in our current thinking when we see the amounts spent for a rather limited environmental study and the lack of study for local economics or flood control.

Additional attachments to our testimony have been submitted to the Committee for your reference. These expand upon the use of the plover and tern as instruments to prevent flood control development. More interesting may the attachment with excerpts indicating how people are instructed on ways to use the ESA to prevent any other activity they wish to stop. This strongly indicates that the ESA is primarily being used to implement an agenda to prevent growth and respect for human needs, concerns and rights.

Mr. Chairman and members of the Committee, we certainly thank you for the opportunity to make our statement before you. You are dealing with a very critical issue that affects our part of the country as well as nearly every other area of the country. We strongly support the amendment being considered and referred to the "Flood Prevention and Family Protection Act of 1997". We certainly need this common sense improvement in a body of administrative regulation that has reduced human incentive, prevented improved flood control and delayed or prevented efficient economic development. We must establish a legislative priority and administrative system to maintain and improve our infrastructure including flood control structures and human concerns.

Special Conditions

1. That applicant shall not cause:

   a. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulations;

   b. water pollution as defined and prohibited by the Illinois Environmental Protection Act; and

   c. interference with water use practices near public recreation areas or water supply intakes.

2. That applicant shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.

3. That any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all State statutes, regulations and permit requirements with no discharge to the waters of the State unless a permit has been issued by Illinois Environmental Protection Agency. That any back filling must be done with clean material and placed in a manner to prevent violation of applicable water quality standard.

4. That all areas affected by construction shall be mulched and seeded as soon after construction as possible. That applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of staked straw bales, sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. That applicant shall be responsible for obtaining an NPDES Storm Water Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of five or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Illinois Environmental Protection Agency's Division of Water Pollution Control, Permit Section.

5. That applicant shall implement erosion control measures consistent with the "Standards and Specifications for Soil Erosion and Sediment Control" (IEPA/WPC/87-012).

6. That applicant is advised that the following permit(s) must be obtained from the Illinois Environmental Protection Agency: the applicant must obtain permits for the open burning of trees, brush and other materials prior to construction.

7. That applicant coordinate future land use proposals with the U.S. Department of Agriculture, Natural Resources Conservation Service, Carrollton Field Office, as well as, the U.S. Army Corps of Engineers, St. Louis District, Regulatory Branch. This condition specifically refers to any potential conversion of cleared timber areas to row crops you may wish to pursue. Any proposals to do so shall be coordinated with the above agencies.

8. That no tree felling should occur between May 1 and August 31 to avoid potential impacts to Indiana bats, which may inhabit the area.

9. That applicant notify this office with the location of disposal of felled trees. The trees should not be placed within flood prone areas or within wetlands. Burning requires permits from the Illinois Environmental Protection Agency (see condition number 6).

10. In addition you are required to obtain clearance from the Illinois Historic Preservation Agency (IHPA), in order to satisfy requirements set forth under Section 106 of the National Historic Preservation Act. A copy of this clearance must be provided to this office prior to construction. You may contact Ms. Anne Haaker, IHPA, at (217) 785-4512 for more information on compliance with Section 106.

11. That applicant notify the Corps of Engineers should any change in size, location or methods to accomplish the work occur. Changes could potentially require additional authorizations from the Corps as well as other Federal, state or local agencies.

12. That the applicant notify the Corps of Engineers upon completion of all work relative to the project. A compliance inspection by the Corps will be carried out in order to witness that all conditions have been complied with during construction.

UPPER MISSISSIPPI RIVER
ILLINOIS WATERWAY SYSTEM
NAVIGATION STUDY

Key Milestones for the Current Project Study Plan

- APR 93 Start Feasibility Study
- MAR 98 Identify NED Plan
- SEP 98 Select Recommended Plan
- NOV 98 Alternative Formulation Briefing
- SEP 99 Feasibility Review Conference
- JUN-JUL 99 Public Review of Draft Report and EIS
- DEC 99 Division Commander's Public Notice

Current Project Study Plan Fully Funded Feasibility Study Cost Estimate ($1,000)

Study Management and Plan Formulation	$ 4,570
Engineering	$14,320
Economics	$ 4,120
Environmental	$20,800
Historic Properties	$ 1,350
Public Involvement	$ 2,150
Total	$47,310

For information on the various workgroups associated with these funding categories, retrun to the Navigation Stduy Home Page and follow the links from there. Do so by clicking here.

Also, more detailed information, including some interim study products, is available at the Rrock Island District's Navigation Study page.

Last revision: 3 Feb 97

THE ENDANGERED SPECIES ACT.[1]

The Federal Endangered Species Act is both the most powerful and most controversial piece of environmental legislation every enacted by Congress. It has provided for legal (if not actual) protection of more than 800 threatened and endangered species and of at least portions of the critical ecosystems they depend on.

The Endangered Species Act, under fire and up for Congressional reauthorization as this book went to press (1994), provides important opportunities for river activists. It is a powerful weapon but, because of the political backlash it creates, sometimes a dangerous one to use.

In addition to the federal ESA, most states have their own versions of the Act and it is not unusual for there to be discrepancies between state and federal listings. California activists, for instance, won an "endangered" listing under the state Act for the Sacramento winter run chinook salmon before the fish was granted "threatened" status under the federal Act.

What it Does

The purpose of the Endangered Species Act of 1973 is elegantly simple: It provides both legal means for conserving the ecosystems upon which endangered and threatened species depend, and it creates a program for the conservation of the species. To qualify, species must be "listed," following an exhaustive review process. Listing for terrestrial species is done by the U. S. Fish and Wildlife Service, while marine and anadromous[2] species are listed by the national Marine Fisheries Service. Listing can be a contentious and tortured process, as the snail darter and spotted owl illustrate.

The Act creates two categories of listing: An *endangered* species is "in danger of extinction throughout all or a significant portion of its range," while a *threatened* species is "Likely to become an endangered species within the foreseeable future."

Part of what gives the Endangered Species Act its teeth (and stirs so much controversy) is a provision that **decisions on listing species must be made independent of financial or social consequences** (although economic impact plays a major role in other provisions of the Act). The listing process is supposed to be guided by science, not politics. It is, of course, obvious that this isn't always the case. Politics does, in fact, play a major role in species protection (the Reagan Administration delayed a decision on the Northern spotted owl for nine years), but several tough listings have nevertheless been made in the face of major opposition.

Once a species is listed, some remarkably stringent rules take effect. Listed species are protected from any action authorized, funded, or taken by a federal or state agency that would threatened their existence. Additionally, listed species cannot be "taken" (an all-purpose word that includes killing, hurting, removing, uprooting, and other nasty actions) by anyone, without a special permit, regardless of where they are found.

There are, of course, exceptions to every rule, and in the case of ESA, members of a listed species can by taken "incidental" to other activities (like urban development or **construction of a dam**), if an **approved Habitat Conservation Plan** is developed to offset any damage to the species.

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[1] From: "How to Save a River, A Handbook for Citizen Action" (1994) by David M Bolling, and River Network, of Portland Oregon, Pages 161 - 165

[2] **Anadromous:** Ascending rivers from the sea, at certain seasons, for breeding, as shad. Webster.

The Act required the U. S. Fish and Wildlife Service and the National Marine Fisheries Service to develop and administer recovery plans for the protection of all plant and animal species listed as threatened or endangered. But both agencies are overwhelmed by the work required and at this writing only 60 percent of listed species have approved recovery plans.

How to Use It

Aquatic ecosystems have the greatest variety of non oceanic species on the planet and the highest rate of extinction. It is impossible, therefore, for the Fish and Wildlife Service, the National Marine Fisheries Service, or any other agency of government, to monitor the species health of all the plants and animals inhabiting river environments. That's where river activists come in. Endangered species experts at the U. S. Fish and Wildlife Service will tell you that both the listing process and the formulation of recovery plans are deeply affected by public input.

Here are some of the ways you can use the Act to protect your river.

1. If you have evidence that a listed species occupies your river's ecosystem, find a competent biologist to confirm and document its presence. That evidence can then be presented to the Fish and Wildlife Service or your state's Fish and Game department, along with an explanation of the development activity threatening both the river and the species' habitat. If, for instance, the activity were a water diversion, the ESA could be used to mandate more water for your river, assuming that existing or increased instream flow could be shown to be necessary for the protection or creation of critical habitat.

2. If you think an endangered species in your river ecosystem isn't being properly protected, you can join the parade of litigants who have filed citizen suits under the Endangered Species Act to ensure that the Act is fully implemented and enforced.

3. If you feel there is insufficient critical habitat to protect a listed species in your river system, you can petition the Fish and Wildlife Service under the Administrative Procedures Act for an administrative modification to expand critical habitat.

4. If you suspect there is a threatened or endangered species in your river which hasn't been listed, you can proposed a new listing by submitting a petition to the Secretary of Interior, along with the descriptions of the species' taxonomic status, its biology, and an explanation of why it is endangered. you case will be bolstered if you provide sufficient reference information to make life easier for USFWS staff reviewing your petition. The more information the better.

The species you propose for listing need not be in danger of overall extinction; listing can be granted to a distinct population of a species in danger of disappearing from even a portion of its range. Once you submit a petition, it will be reviewed for accuracy and, if accepted, the species will be considered a "proposed species." At that point, the Fish and Wildlife Service initiates intense research to determine the true status of the species and the nature of "critical habitat" necessary for its survival and recovery. A lengthy public review process is also initiated, during which organized opposition may emerge.

The Service is supposed to decide, within 12 months of receiving your petition, whether or not to list the species. (During this time the species receives some very limited protection in the form of increased consideration by federal agencies about the effects of their activities.)

Sometimes the Service may decide a species should be listed, but that other listings are of greater priority given limited resources. Or the service may decide that no enough information is currently available to make a listing decision. Those species, commonly referred to as "candidate species," have historically been left in limbo awaiting listing decisions, and receive virtually no protection under the ESA. Over the years, a backlog of more than 3500 candidate species awaiting listing proposals has built up. However, thanks to a recent lawsuit filed by environmentalists, the Fist and Wildlife Service has agreed to eliminate the backlog by 1996.

Because of the sheer volume of new petitions and backlogged candidate species, and because a listing decision may have a profound impact on development and therefor be subject to heavy political pressure, it can sometimes take years to get a species listed.

5. You can participate in the development of recovery plans for listed species, thereby influencing important decisions bout the preservation of critical habitat in your river system.

Pros

Listing a species as threatened or endangered is one of the surest ways of stopping a river-threatening activity or forcing the restoration of an aquatic ecosystem.

Restoration efforts on the Sacramento River lagged until a series of listings under both the state and federal Endangered Species Acts -- including the Winter run Chinook salmon -- gave state and federal agencies a strong incentive to act. These listings didn't happen spontaneously; citizen pressure helped make them happen.

The ESA can also be used as a carrot or whip to inspire public agencies toward actions they might otherwise be reluctant to take. It is cheaper and faster, some agency officials believe, to take preemptive actions to protect a species before the heavy hand of the ESA is imposed from above.

Cons

Use of the Endangered Species Act provokes an almost religious backlash from the Wise Use movement and stirs up paranoia in the hearts of those Americans who fear any government control of private property.

Aquatic organisms include the most rapidly growing numbers of endangered species, creatures crucial to the food chain but largely anonymous and unseen. It's hard to build a constituency for these species since the public usually lacks sympathy for salamanders, mussels, and obscure fish. Listing of the tiny Delta Smelt in California forced the state to reserve additional water for the Sacramento-San Joaquin Delta, which benefited numerous species but enraged Central Valley growers who wanted the water. A contractor from the Central Valley voiced a common sentiment when he complained to the *San Francisco Chronicle*, "You're taking our water to protect a one-inch, transparent fish that smells like a cucumber?"

While economic impact is not supposed to be a factor in listing process, it is supposed to be a factor in the determination of critical habitat and recovery plans. That means that the economic value of water diversions, for example, would be weighed against the value of enhanced stream flows for the preservation of endangered fish.

Beyond the issues of public backlash and economic impact is the question of effectiveness. None of the fish listed since the Act took effect have reached the state of recovery and at least four listed fish have vanished from the face of the earth.

Finally, the time required for a listing to be approved is often so long that use of the Act usually isn't an effective short-term strategy for protecting your river.

Dams[1]

Comments not found in the book are in Italics

No human development presents as singular and visible a threat to a river as a dam. Dams have the unique capacity to utterly disrupt the entire river ecosystem[2] with one act of construction. And while a dam may not be forever, its monumental presence premises to outlast several human generations and animal species whose habitat it destroys.

Dams do not destroy animal species habitat any more than houses, highways, railroads, air fields ________ etc. They serve a fundamental purpose

There are so many dams on America's rivers that no one seems to know the precise number, although estimates range from 60,000 to 80,000 and the Environmental Protection Agency suggest the figure as 68,000 major impoundments. When farms ponds are added to the equation, the National Resource Council[3] reports a total of "well over" 2.5 million dams in the United States.

Since there are so many dams it would appear that citizens have come to the conclusion that dams are an important feature in today's world, such as houses, shopping centers, roadways, etc.

These dams have buried 17 percent of the nation's rivers beneath reservoirs, and have adversely affected an even larger percentage of river habitat by interrupting flows, altering water temperature, blocking wildlife migration corridors, and imposing numerous other changes on natural systems. By contracts, less than 1 percent of the nation's river miles are protected in their natural state.

How many rivers do we have? How long are they? How many miles of each contain reservoirs? What benefits to habitat does dams provide? Don't they far outweigh the benefits of a free flowing stream? Do dams reduce the amount of wetlands? Are there more wetlands with free flowing streams? Is the theory to return all the river miles to their natural state? What is the value of the natural state?

While dams have created ecological havoc, it's important for us to acknowledge the good dams have done. We all depend on the power and water produced by dams, as well as on navigation and flood protection they provide. But far too many dams have been built, many for no justifiable reason.

Are they talking out of both sides of their mouth? Which dams were built for no justifiable reason? Why would people spend large sums for no benefit? Is the problem that dams do not benefit the writer? Are benefits to others not counted?

Between 1962 and 1968 more than 200 major dams were completed in North America *each year* and, during the same period, smaller dams were being constructed at the rate of more than 2000 per year. More than 6000 major new dams have been proposed in the U. S. during the last ten years. The numbers may be difficult to grasp, but it's not difficult to imagine the negative impact of all those dams have had on rivers and streams.

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[1] From: "How to Save a River, A Handbook for Citizen Action" (1994) by David M Bolling, and River Network, of Portland Oregon, Pages 213-221.

[2] The complex of a community and its environmental functioning as an ecological unit in nature.
ecology 1: a branch of science concerned with the interrelationship of organisms and their environments. 2: the totality or pattern of relations between organisms and their environment.

[3] What is the National Resource Council. An Environmental group?

It would appear that if so many dams are being built and proposed that there is a great need out there for dams. What negative impact are they talking about from the dams? Hydropower? Navigation? Flood Control? Commerce and Industry?

Dams serve a variety of different functions and, although many dams are built with multiple purposes, we will better understand dams and the problems they create if we divide them into three categories.

Storage Dams

Major storage dams-which are almost always multiple purpose projects also offering flood protection, recreation, and often hydropower -- represent the archetypal[4] river threat. Their construction imposes a massive environmental trauma on river canyons, their reservoirs bury vast reaches of free-flowing river, and their regulation of downstream flow frequently upsets dynamic hydrologic cycles upon which plants and animals depend.

With dams in the way, sediment transport is blocked, which eliminates a source of replenishment for riparian farmland and leads to subsidence and erosion of delta lands. Coastal beaches are eroded away when replacement sediment is not available from rivers blocked by dams.

So what?

Because most multipurpose storage dams release clear, cold, sediment free water, the discharge radically effects every aspect of the downstream ecosystem. Cold, deoxygenated water released from the bottom of reservoirs negatively impacts native stream organisms used to warmer aerated water.

I understood that the water came from the top layers so that it would have a longer fall. Going through the turbines would surely increase the oxygen in the water.

Clear water, deprived of dam-trapped sediment (called "hungry water" by hydrologists) seeks to reestablish equilibrium by scouring up new sediment from streambed and banks, accellerating erosion, and downcutting the riverbead. As the riverbed is downcut, the mouths of tributary streams slump, causing further erosion up into tributaries, which degrades key spawning habitat.

I though clear water was want we were looking for, not dirty water. Does clean water cut worse than dirty water. What is the comparison on that.

The driving force behind storage dams is the need -- or the perceived need -- for more water. Until very recently, water development policy (like energy development policy) has been the product of supply-side thinking. Water has traditionally been viewed as a limitless resource, and whenever more supply was needed new dams and resources were built. Little attention was paid tot he demand side of the equation and the possibility of streaching supplies by reducing consumption and increasing efficiency of use. The result was, and is, extravagant waste.

Are they saying that their plan is to reduce the amount of water available for use?

Take, for example, the proposed multipurpose version (as opposed to the flood control-only version) of Auburn Dam, which would -- if it's every built -- cost something in excess of $2 billion. The ater storage component of that cost was estimated in 1990 at about $400 million, for which a maximum of 270,000 acrefeet of enw water would be stored each year.

---

[4] The original of which all things of the same species are representations or copies, original idea, model or type, prototype.

With these figures tucked in the back of your mild,consider the question or irrigated cotton in California, of which tchre are some 1.1 million acres. Cotton uses vast amounts of water -- three or four feet, or more, per acre each year. But experiments with subsurface drip irrigation have demonstrated that this simple technology can reduce the water requirements of cotton fields by more than 50 percent, with the added benefit of an increase in productivity.

Subsurface drip is expensive to install, costing something on the order of $1000 per acre. But if, for the sake of argument, we were able to take the $400 million earmarked for water storage at Auburn Dam, and in vest it instead in subsurface drip irrigation, we could efficiently irrigate 400,000 acres of cotton. if the results of the extensive experiments done to date are an accurate guide, four hounded thousand acres of subsurface drip would save, perhaps, 800,000 acre-feet of water, year after year, or about three times the most optimistic firm annual yield of Auburn Dam.

Wouldn't a regulation such as that be a grand way to destroy agriculture? Are they proposing that no new dams be constructed and that existing dams be destroyed also?

These figures are rough estimates and there is yet no funding mechanism for investing water storage money in irrigation technology. But that simply underscores the problem; an inadequate commitment to irrigation efficiency and agricultural water conservation. The western U. S., irrigated agriculture uses about 85 percent of all developed water, and the General Accounting Office has estimated that 50 percent of the nation's irrigation water is wasted.

It would be wrong, of course, to single out irrigated agriculture as the only example of inefficient water use. Some of the nation's major cities -- like Sacramento -- still don't use residential water meters, and all over the country leaking water pipes waste water. But more importantly, we have to adopt any comprehensive national program to mandate urban water efficiency and to require that water rate structures encourage conservation instead of waste.

Are they calling for higher water rates?

More than 20 years ago the National Water Commission called for pricing reform, penalties for excessive water consumption, leak control programs, universal water metering, and plumbing codes requiring installation of water efficient fixtures. With the exception of federal codes for new plumbing, those suggestions have only been implemented randomly around the country, and usually only in response to local water crises.

Is River Network proposing to create a lot of new water crises?

The single most effective way to protect rivers from more storage dams is to require more efficient use of the water already developed.

Flood Control Dams

Water storage and flood control are usually companion purposes for large dam projects, even though the objective of one contradicts the other. The purpose of a water storage dam is to hold a maximum pool of water for as long as possible. The purpose of a flood control dam is to keep a minimum pool of water for as long as possible. These twin purposes usually result in construction of a larger dam than is needed for either single objective, and they often lead to a conflict in the management of the dam.

The impacts of flood control dams are the same as for storage dams, with one added problem: When a dam is used for flood control the level of the reservoir behind if must be periodically lowered to accommodate incoming flood waters, which then raise the level again. This periodic and sudden fluctuation of reservoir level can destabilize sensitive canyon slopes creating landslides into the reservoir, further degrading the remaining watershed habitat. And of course, all reservoirs used for water storage, flood control, or hydropower invariably exhibit so-called "bathtub rings" of naked mud and dead trees as the water level drops over the season of use.

But these negative impacts are minor when compared to the real problems with flood control dams; they don't stop floods, they encourage floodplain development, and their construction often leads to more disastrous flooding than would occur without them.

... It is a mistake to think that dams stop floods; more accurately, they delay floods, make them less frequent. It's true that the nation's hundreds of flood control dams have contributed to the safety of human populations along river corridors. But that safety is never absolute and it contributes to a false sense of security, which itself encourages more people to live in the path of inevitable flood waters.

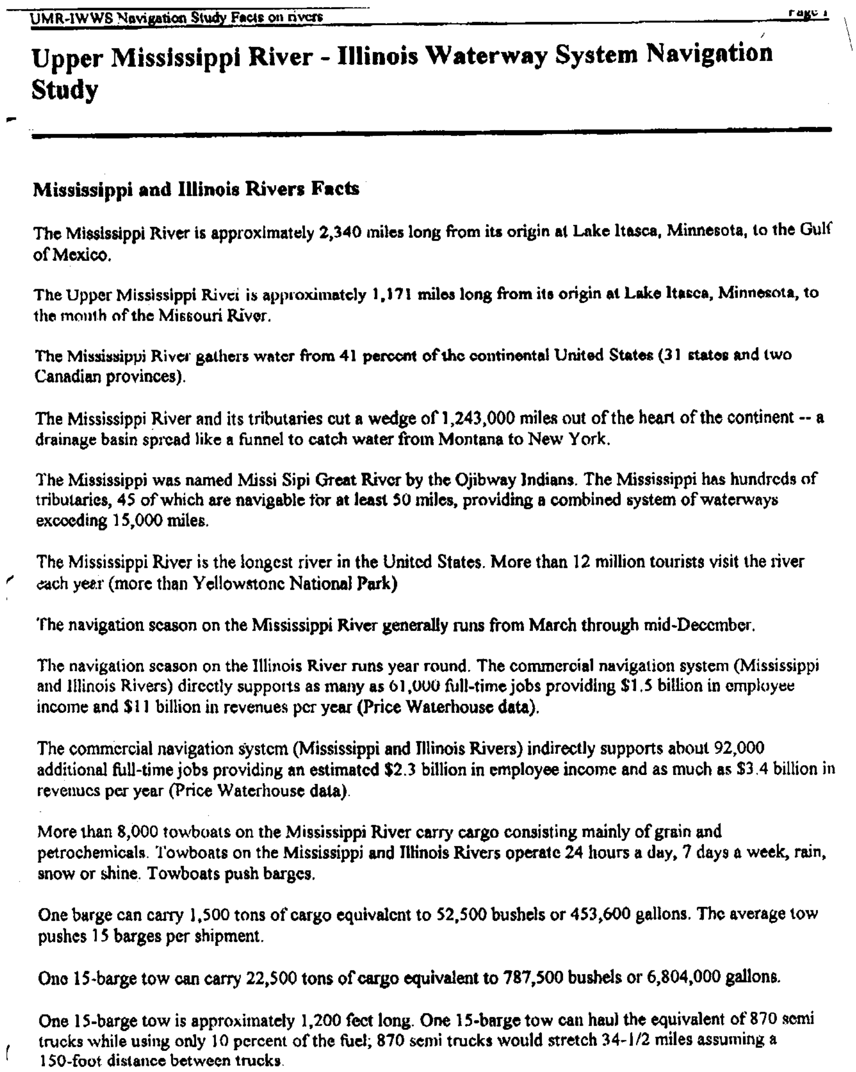
Are they trying to get the farmers to give up and no longer pursue Flood Control? Is that our present position? Have we given up?

Despite the billions of dollars invested in flood control in this century, the annual costs of flood damage continues to rise, largely because of the proliferation of devilment in flood plains. The Army Corps of engineers claims that its flood control projects have returned $3.50 in value for each dollar spend, but Corps figures are notoriously suspect.

They do not, for instance, include the true cost of environmental destruction created by flood control projects they wildly exaggerate recreational benefits, and they often claim value for as-yet unbuilt development which Corps projects will allow and encourage in the flood plain. ...

The Great Mississippi Flood of 1993 makes tragically clear the false security of flood control projects. No amount of dams and levees and sandbags will stop the Mississippi from periodically asserting its awesome power. And it will never be practical or even possible to build adequate levees around every town and village along its banks. In fact levees, by constricting the river into an unnaturally narrow channel, actually raise the level and speed of flood waters, making them more destructive. ...

The National Flood Insurance Program was enacted to discourage flood plain development. But zoning decisions in flood plains all over the country suggests the message still hasn't been heard.



Upper Mississippi River - Illinois Waterway System Navigation Study

Mississippi and Illinois Rivers Facts

The Mississippi River is approximately 2,340 miles long from its origin at Lake Itasca, Minnesota, to the Gulf of Mexico.

The Upper Mississippi River is approximately 1,171 miles long from its origin at Lake Itasca, Minnesota, to the mouth of the Missouri River.

The Mississippi River gathers water from 41 percent of the continental United States (31 states and two Canadian provinces).

The Mississippi River and its tributaries cut a wedge of 1,243,000 miles out of the heart of the continent -- a drainage basin spread like a funnel to catch water from Montana to New York.

The Mississippi was named Missi Sipi Great River by the Ojibway Indians. The Mississippi has hundreds of tributaries, 45 of which are navigable for at least 50 miles, providing a combined system of waterways exceeding 15,000 miles.

The Mississippi River is the longest river in the United States. More than 12 million tourists visit the river each year (more than Yellowstone National Park)

The navigation season on the Mississippi River generally runs from March through mid-December.

The navigation season on the Illinois River runs year round. The commercial navigation system (Mississippi and Illinois Rivers) directly supports as many as 61,000 full-time jobs providing $1.5 billion in employee income and $11 billion in revenues per year (Price Waterhouse data).

The commercial navigation system (Mississippi and Illinois Rivers) indirectly supports about 92,000 additional full-time jobs providing an estimated $2.3 billion in employee income and as much as $3.4 billion in revenues per year (Price Waterhouse data).

More than 8,000 towboats on the Mississippi River carry cargo consisting mainly of grain and petrochemicals. Towboats on the Mississippi and Illinois Rivers operate 24 hours a day, 7 days a week, rain, snow or shine. Towboats push barges.

One barge can carry 1,500 tons of cargo equivalent to 52,500 bushels or 453,600 gallons. The average tow pushes 15 barges per shipment.

One 15-barge tow can carry 22,500 tons of cargo equivalent to 787,500 bushels or 6,804,000 gallons.

One 15-barge tow is approximately 1,200 feet long. One 15-barge tow can haul the equivalent of 870 semi trucks while using only 10 percent of the fuel; 870 semi trucks would stretch 34-1/2 miles assuming a 150-foot distance between trucks.

One 15-barge tow can haul the equivalent of 225 train hopper cars; 225 train hopper cars would stretch 2-1/4 miles.

Locks and dams on the Mississippi and Illinois Rivers were constructed in the early 1930s with a projected lifespan of about 50 years.

The majority of locks on the Mississippi and Illinois Rivers are 600 feet long. The normal tow navigating on these rivers is 1,200 feet long (15 barges).

A 1,200-foot long, 15-barge tow must separate in half in order to use the 600-foot-long locks.

Separating a tow results in lockage times of roughly 90 to 120 minutes as compared to 30 minutes when locking as one unit through a 1,200 foot lock.

It is estimated that it costs commercial shippers between $300 and $600 for every hour waiting to, or locking through, a Mississippi or Illinois River lock.

Commercial shippers support the operations and maintenance of the Mississippi and Illinois River lock and dam system and the construction of new locks and dams by paying a tax of approximately 19 cents per gallon of fuel.

There is currently no other commercial shipping mode more cost efficient or safe as river transportation.

April 7, 1997

Dave McMurray
10 Cascade Terrace
Burlington, IA 52601
(319) 752-9527

UPPER MISSISSIPPI, ILLINOIS
+ MISSOURI RIVERS ASSN.
– 4/10/97 TESTIMONY
H.R. 478

In re: Endangered Species Act.

Dear Dave,

Paul Davis is sending copies of some correspondence he had with the Fish and Wildlife and the Corps of Engineers regarding placing a structure at the mouth of Bartlett Creek for Howard County Levee District #4 and Howard County Levee District #2 so that they could save costs by not having to raise the levees on each side of the Creek. The Fish and Wildlife in their letter of March 29, 1994 adopted their boilerplate response "It is not clear as to how much wetland and aquatic habitat would be affected due to the proposed project. Because of the possible negative impacts to fish and wildlife resources, we do not believe this project is in the public interest. Continued loss of Missouri River wetland and floodplain habitat is unacceptable. We suggest the two levee districts pursue other alternatives of flood protection, such as setting back the levees." Their plan was clearly unacceptable to the levee districts.

The Corps then in their letter of August 24, 1994 made the following suggestion: "We recommend you obtain the services of a multidisciplinary engineering firm to study and report on the feasibility and impacts of your project." The districts felt that they did not have the $10,000 or more to hire an engineering firm so had to drop the project as the Fish and Wildlife intended.

To study these letters it might be well to consider an article on the Endangered Species Act found in a book published in 1994 for the River Network, of Portland Oregon entitled "How to Save a River, A handbook for Citizen Action." The article frankly states

> "Once a species is listed, some remarkably stringent rules take effect. Listed species are protected from any action authorized, funded, or taken by a federal or state agency that would threatened their existence. Additionally, listed species cannot be "taken" (an all-purpose word that includes killing, hurting, removing, uprooting, and other nasty actions) by anyone, without a special permit, regardless of where they are found."

I also enclose some comments found in the handbook regarding Dams.

The Endangered species law has adversely effected the operation of the Missouri River Main Stem system since 1985 when the least tern and the piping plover were listed as endangered and threatened species. Prior to these listings their nests were periodically inundated as a result of project releases for flood control, navigation, and hydroelectric power generation. Since the listings the corps has adjusted the releases so as to not interfere with the birds to the detriment of the basic purposes of the projects. The 1987-88 APO first mentioned the Endangered species and each APO since that date has had large sections addressing this problem. In fact several years ago one of the more militant Fish and Wildlife agents threatened to have charges filed against the former Chief of the Missouri River Control section if he didn't take some action the Fish and Wildlife wanted. The 1996-97 APO devoted pages 25, 26, 87, 88, 89, 90, 91 and 92 to the Endangered and Threatened Species. In essence they must have higher discharges from May through August than are necessary for navigation so that they may keep the birds nesting high on the sand bars. I enclose an interesting article from the September 1995 Engineer newsletter which gives you an idea of the effort that is made to take care of the birds. In September of 1990 the Pallid Surgeon was listed and the Paul Davis letters show what they are doing with them.

They don't just pick on the poor farmers. Here one of the latter letters they sent to the Corps in October of 96 regarding the Annual Operating Plan.

I appreciate all the work you all are doing.

Sincerely,

Bill Lay
Route #3, Box 119
Fayette, Mo. 65248
(816) 248-3068

ATTACHMENT TO TESTIMONY
page 1 of 25

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Fish and Wildlife Enhancement
Columbia Field Office
608 East Cherry Street
Columbia, Missouri 65201

IN REPLY REFER TO:

FWS/AES-CMFO

MAR 29 1994

Colonel Richard H. Goring
District Engineer
Kansas City District, Corps of Engineers
700 Federal Building
Kansas City, Missouri 64101

Dear Colonel Goring:

This is in reference to Public Notice Number 94-00188, dated February 22, 1994, regarding the application of Howard County Levee District #4 and Howard County Levee District #2 for a Department of the Army permit to place fill material in Bartlett Creek, approximately 1,100 feet upstream of its confluence with the Missouri River, mile 198.0, Howard County, Missouri.

Following are the comments of the U.S. Fish and Wildlife Service (Service) pertinent to this proposed activity, prepared under the authority of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.), the National Environmental Policy Act of 1969 (42 U.S.C. 4321-4327), the Endangered Species Act of 1973, (16 U.S.C. 1531-1543), as amended, and the U.S. Fish and Wildlife Service Mitigation Policy.

The applicants propose to construct a cross levee with two steel culvert flood control structures in the creek between Howard County Levee No. 2 and No. 4. The purpose of the cross levee is to "lessen the impacts of flooding on residential, commercial, and agricultural properties, including area state highways." The proposed structure would not be placed in a wetland, but would "hydrologically impact upstream interspersed wetlands and an approximately 5-acre wooded wetland located downstream of the proposed structure at the mouth of Bartlett Creek.

The proposed project is within the range of the pallid sturgeon (*Scaphirhynchus albus*). The range of the pallid sturgeon is primarily the Missouri River and the Mississippi River downstream of its confluence with the Missouri River. Pallid sturgeon require large, turbid, free-flowing, braided-channel riverine habitat with sandy and rocky substrates. Modifications to this species' habitat have blocked movements, destroyed or altered its spawning areas, reduced its food sources or its ability to obtain food, altered water temperatures, and changed the hydrograph of the large riverine habitat it requires to successfully complete its life cycle. Over-fishing, pollution, and hybridization also may have led to the species' dramatic

listing as endangered.

Because of the precarious position of the pallid sturgeon, it is imperative that activities that may further impact its habitat be scrutinized closely. A major goal of the Pallid Sturgeon Recovery Plan[1] is protection and restoration of riverine habitat diversity, including backwaters, side channels and tributary mouths.

We cannot concur at this time with your preliminary determination that the project will not affect the pallid sturgeon. Because the pallid sturgeon may occur in the project area, it is the responsibility of the Corps of Engineers to determine whether its action may affect this species. Any adverse effect that cannot be avoided triggers a "may affect" finding and the formal consultation requirements at 50 CFR 402.14. Formal consultation is initiated by a written request from your agency to this office.

An exception to formal consultation is if the Service provides written concurrence with a written finding by the Corps that its action "is not likely to adversely effect listed species." The Corps should support such a finding with adequate data and analyses submitted concurrently with any not likely to adversely affect conclusion.

The purpose statement contained in the Public Notice is not clear as to how the proposal would lessen the impacts of flooding. We assume the flooding in question is backwater from high flows on the Missouri River. How would flows in Darlett Creek from basin run-off be managed with the proposed structure in place?

There are several blue holes on Dartlett Creek that were created from the 1993 flood that could provide important habitat for fish and wildlife species. The flap gates on the culverts probably would restrict any movement of aquatic species to and from the Missouri River.

Levees on the Missouri River have increased flood heights by reducing main channel flood storage capacities. Cross levees such as is proposed should not be encouraged because they probably would contribute to further reduction in storage capacity of the main channel and effective flood plain.

It is not clear as to how much wetland/aquatic habitat would be affected due to the proposed project. Because of the possible negative impacts to fish and wildlife resources, we do not believe this project is in the public interest. Continued loss of Missouri River wetland and floodplain habitat is unacceptable. We suggest the two levee districts pursue other alternatives of flood protection, such as setting back the levees.

---

[1] Pallid sturgeon recovery team. November 7, 1993. Pallid sturgeon recovery plan. Fish and Wildl. Serv., Denver CO. 33+pp.

Should you have questions concerning these comments and recommendations, or if we can be of any further assistance, please contact Rick Hansen at the address above, or by telephone at (314)876-1911.

Sincerely,

Rick L. Hansen

for Jerry J. Brabander
Field Supervisor

cc: MDC; Jefferson City, MO (Attn: Dan Dickneite)
MDC; Jefferson City, MO (Attn: Dennis Figg)
MDNR; Jefferson City, MO (Attn: John Madras)
EPA; Kansas City, KS (Attn: Kathy Mulder)

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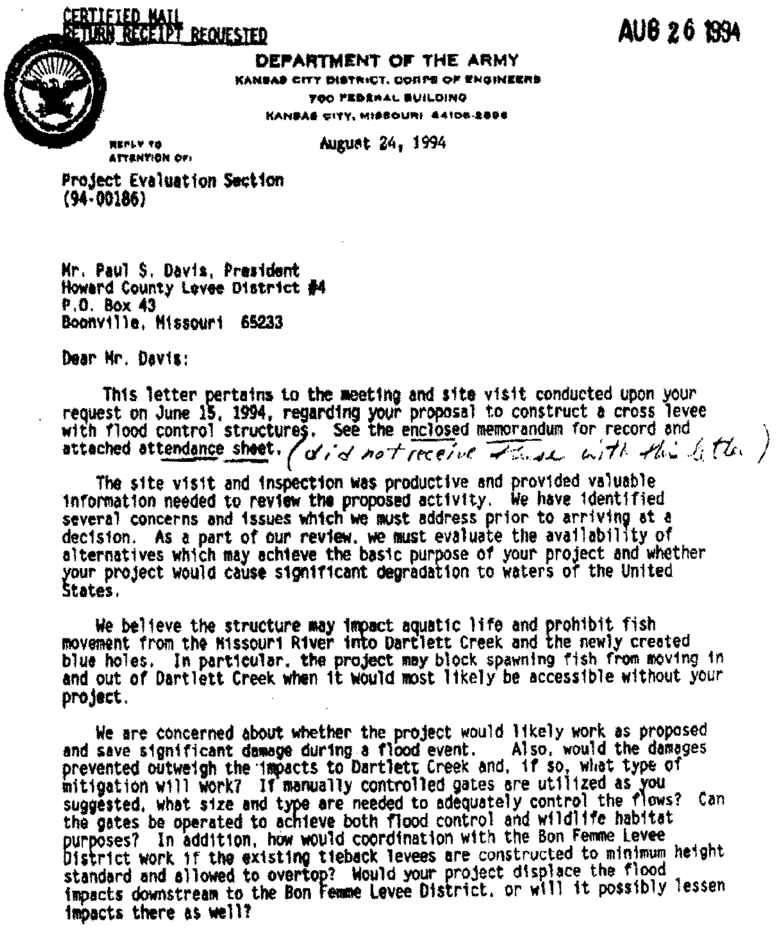


CERTIFIED MAIL
RETURN RECEIPT REQUESTED

AUG 26 1994

DEPARTMENT OF THE ARMY
KANSAS CITY DISTRICT, CORPS OF ENGINEERS
700 FEDERAL BUILDING
KANSAS CITY, MISSOURI 64106-2896

August 24, 1994

REPLY TO
ATTENTION OF:

Project Evaluation Section
(94-00186)

Mr. Paul S. Davis, President
Howard County Levee District #4
P.O. Box 43
Boonville, Missouri 65233

Dear Mr. Davis:

This letter pertains to the meeting and site visit conducted upon your request on June 15, 1994, regarding your proposal to construct a cross levee with flood control structures. See the enclosed memorandum for record and attached attendance sheet. (did not receive these with this letter)

The site visit and inspection was productive and provided valuable information needed to review the proposed activity. We have identified several concerns and issues which we must address prior to arriving at a decision. As a part of our review, we must evaluate the availability of alternatives which may achieve the basic purpose of your project and whether your project would cause significant degradation to waters of the United States.

We believe the structure may impact aquatic life and prohibit fish movement from the Missouri River into Dartlett Creek and the newly created blue holes. In particular, the project may block spawning fish from moving in and out of Dartlett Creek when it would most likely be accessible without your project.

We are concerned about whether the project would likely work as proposed and save significant damage during a flood event. Also, would the damages prevented outweigh the impacts to Dartlett Creek and, if so, what type of mitigation will work? If manually controlled gates are utilized as you suggested, what size and type are needed to adequately control the flows? Can the gates be operated to achieve both flood control and wildlife habitat purposes? In addition, how would coordination with the Bon Femme Levee District work if the existing tieback levees are constructed to minimum height standard and allowed to overtop? Would your project displace the flood impacts downstream to the Bon Femme Levee District, or will it possibly lessen impacts there as well?

Because of the apparent impacts to Dartlett Creek, we need additional information from you to assist us in preparing an environmental assessment and to analyze potential alternatives that may satisfy the basic purpose of your project.

Before we can make a decision on your request, you must address the above issues and concerns. We recommend you obtain the services of a multi-disciplinary engineering firm to study and report on the feasibility and impacts of your project. We will review the information and explore possible alternatives as soon as possible after we receive a thorough report from you. If you wish us to meet with you and your engineering consultant, or if you have any questions concerning this matter, please feel free to write me or to call Mr. Mel Stanford at 816-426-2116.

Sincerely,

Joseph S. Hughes
M. D. Jewett
for Chief, Regulatory Branch
Operations Division

Copies Furnished:

Gary Ginter, President, Howard County L.D. No. 2
Kathy Mulder, Environmental Protection Agency,
  Wetlands Protection Section
Rick Hansen, U.S. Fish and Wildlife Service,
  Columbia, Missouri
Todd Hudson, Missouri Department of Natural
  Resources
Gary Christoff, Missouri Department of Conservation
ED-HR Vento
FD-NA-JC
OD-PC

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
1500 East Capitol Avenue
Bismarck, North Dakota 58501

OCT 24 1996

Mr. Chet Worm
Chief, Reservoir Control Center
Missouri River Division
U.S. Army Corps of Engineers
12565 West Center Road
Omaha, Nebraska 68144-3869

Dear Mr. Worm:

The Fish and Wildlife Service (Service) has reviewed the Corps of Engineers' (Corps) Draft 1996-1997 Annual Operating Plan (AOP) for the Missouri River Main Stem Reservoirs and Summary of Actual 1995-1996 Operations and offers the following comments for your consideration.

The Service participated in the August 6-8, 1996, meeting of the Missouri River Natural Resources Committee (MRNRC) and discussions on operations of the Missouri River system for 1997. The Service endorses the recommendations of the MRNRC in their August 30, 1996, letter to the Corps on the AOP.

The Draft 1996-1997 AOP is nearly the same as the AOP for the last 2 years and follows the current Master Manual except in the circumstance of a significant drought condition when additional water conservation measures would be implemented. The Draft AOP for all five runoff scenarios follows the March 15, July 1, and September 1 storage checks in the Master Manual used to determine navigation flow service level, navigation season length, and the winter multipurpose system releases.

The Draft AOP includes adjusted regulations for fish spawning and endangered species nesting habitat for the Median, Lower Quartile, and Lower Decile runoffs. Releases at Fort Peck, Garrison, Fort Randall, and Gavins Point will be increased in early May to prevent terns and plovers from nesting on low elevation sandbar habitat and maintained at those average levels with steady releases or repetitive daily patterns through late August. A minimum flow of 3,000 cubic feet per second (cfs) will be maintained below Fort Peck during downstream flood conditions.

P 16 of 23 EX 3-1

The Upper Quartile and Upper Decile runoff scenarios, with above normal runoff, follows the Master Manual which requires flood control operations and reduced releases from the main stem reservoirs until flooding has subsided, and subsequently, increased releases for the evacuation of reservoir flood storage during the month of July and/or August. For these two scenarios, the Draft AOP indicates that the Corps will try to avoid the need to move and/or collect eggs of the least tern and piping plover by implementing other avenues of conservation and regulation.

The Median runoff also includes releases which provide a steady to rising lake level in the upper three reservoirs during the spring spawning season. Although daily peaking for hydropower will continue at the upper dams, the 3-day cycling of releases at Gavins Point Dam will again not be adopted in lieu of more constant flows to the level needed to support navigation in August. However, third day peaking would be considered at Fort Randall.

For all operational plan inflow scenarios for the summer of 1997, the 1990 Biological Opinion on Operations of the Missouri River Main Stem System requires the Corps to create habitat for terns and plovers below Fort Randall and Gavins Point Dams. However, the AOP indicates that no habitat creation is planned as efforts will be focused on evaluating the effects of the high 1996 reservoir pools and high spring and summer flows on habitat conditions. If significant drought conditions return to the basin and system storage falls below 52 million acre-feet on July 1, 1997, water conservation measures would be implemented by shortening the navigation season 2 weeks earlier than required by the Master Manual.

General Comments

The Draft 1996-1997 AOP is similar to the 1995-1996 AOP. Therefore, the Service's comments in our October 20, 1995, letter to the Corps are still germane, and some are restated below.

General Flow Recommendations

In general, the Service does not oppose the Median, Lower Quartile, and Lower Decile runoff scenarios, but continues to support an operating scenario that more closely mimics a natural hydrograph. I recommend the implementation of an additional increment of flow to provide a spring rise followed by declining flows from June through August in lieu of the steady flows as proposed. I believe that such a scenario is an integral component to the long-term solution to the environmental degradation caused by the past operations of the Missouri River. Such an incremental change would be less than the spring flows identified in the preferred alternative for the Master Manual Draft . ironmental Impact Statement (i.e., full service plus 20,000 cfs) and much less than the current navigation releases scheduled by the Corps from September to mid-November (i.e.; full service flows plus 25,000 cfs at all target locations) (page 111 of the AOP).

The Corps acknowledges deviations from the Master Manual and AOP based on experiences in recent years (e.g., first full paragraphs on pages 109 and 110). Therefore, I encourage the Corps to use the AOP as a means to test and document the effect of incremental flow changes on the river ecosystem, including native fish recruitment and least tern and piping plover productivity. Furthermore, documentation and monitoring of actual operations, especially those which depart significantly from the AOP, provides important information that would otherwise not be available. I believe that planned deviations to the AOP or "adjusted regulations for ecosystem benefits" could be addressed in an Environmental Assessment.

For the Upper Quartile and Upper Decile scenarios, the Corps proposes a repeat of the spring 1995 and 1996 flood control operations which either forced the birds to nest at low elevations and then put them at risk later when high storage had to be evacuated, or completely inundated nesting habitat. Such action emphasizes the need for the Corps to be more proactive in habitat creation and management for the least tern and the piping plover. High elevation sandbar habitat created by high flows in recent years is apparently not high enough or in sufficient quantity to prevent problems with these two flow scenarios.

I request that the Corps provide annual, updated relationships between discharge and amount and elevation of sandbar habitat. This information is needed for the Service, MRNRC, and others to make informed flow recommendations to the Corps.

Under all runoff scenarios, I continue to recommend that the Corps supply flows in support of tern and plover nesting as required by the November 1990 biological opinion. I recommend releases that more closely mimic a natural hydrograph with flows high before the arrival of terns and plovers. Once the birds arrive, if no tern and plover habitat is available above the high spring flow level, water levels should descend to provide the birds habitat by June 1. When sufficient nesting habitat is available above the high spring flow level, a June 15 descent date is acceptable. Declining flows throughout the tern and plover nesting season is highly recommended.

Tern and Plover Management Recommendations

Like the 1995-1996 AOP, the 1996-1997 Draft AOP does not adequately address the Corps' requirement for meeting the Service's November 1990 jeopardy biological opinion on the effects of operations on the least tern and piping plover. Fledge ratios and habitat requirements for terns and plovers have not been met. The Corps should expand this discussion and explain how they propose to meet the requirements of the biological opinion. I recognize that interim conservation measures are under consideration: regardless, degradation of the system continues.

The Corps should supply report requirements of the November 1990 biological opinion to the Service, as well as the Tern and Plover Management Team, by December 31 of each year. The information presently contained in the Draft AOP is not sufficient to meet reporting requirements as dictated by the Reasonable and Prudent Alternatives and Reasonable and Prudent Measures sections of the November 1990 biological opinion. Please refer to this document for specifics on information to be included in this annual report. Without complete and timely annual reports, the Service and Tern and Plover Management Team cannot provide appropriate tern and plover management views to assist the Corps in meeting fledge ratio requirements.

The Corps also is delinquent on meeting annual reporting requirements for 1994 and 1995 reports for their endangered species subpermit 93-07 issued under authority of permit PRT-704930. Although the Service has received partial reports and information, the Corps needs to finalize these reports and complete the 1996 report by the December 31 deadline. While the subpermit was amended to meet 1996 flood operations, the subpermit expires December 31, 1996. A new subpermit request for 1997 should be received by the Service by November 15, 1996. Without receipt of 1994, 1995, and 1996 subpermit reports, the Service cannot renew the Corps subpermit, as noted in restriction (6.) of subpermit 93-07.

The Corps needs to continue and expand upon habitat and management efforts to meet fledge ratio requirements. A return to a more normal or drought water year provides the opportunity for the Corps to implement habitat and management efforts on a much larger scale than past efforts. Although flood years may prohibit habitat construction or enhancement efforts, the Corps' planning efforts in support of habitat needs to continue. I am concerned that the Corps, acknowledging that the biological opinion requires habitat creation in 1997 below several dams (pages 118 and 119), does not intend to create habitat in 1997. Also, the Corps December 4, 1995, response to the Service's comments on the Draft 1995-1996 AOP and commitment to provide a plan and create habitat in 1996 appears to have been unfilled. Therefore, I reemphasize that the Corps physically restore and create high elevation sandbar habitat if flows are not managed to achieve that habitat. However, flow management may be the most cost-effective and biologically valuable tool to create and maintain clean sandbar habitat.

I emphasize that the Corps' salvage/captive rearing efforts for the least tern and piping plover cannot be a substitute for providing adequate recovery habitat. However, the program has merits and I encourage the Corps to consider additional survival studies specifically designed to assess survival of captive raised chicks in natal release areas. I recommend that the Corps work with researchers to develop and implement research designs to answer these survival questions. The Corps also needs to maintain its proficiency in its captive rearing program. Such initiatives will provide a basis to objectively evaluate the appropriateness of a salvage operation in future years.

Specific Comments

Page 15, Navigation Requirements - The Corps proposes to maintain operational flows at artificial highs below Gavins Point Dam and other upstream dams to preclude endangered species nesting in favor of navigational support. Thus, the Corps appears to prioritize navigation over endangered species nesting. In the bolded paragraph, the Corps refers to the aforementioned action as habitat control for endangered species rather than support for navigation. This paragraph also refers to preliminary results of a Corps study that indicates releases to meet navigation requirements may be less than previously thought. This favors terns and plovers since lower flows usually means more habitat. Please clarify why the Corps would offset these low flow requirements by providing additional releases if the low flow requirements are already being met.

Page 23, Fish and Wildlife - The first paragraph of this section and its references to threatened and endangered species should be clarified. Recently, changes occurred to the list of candidate species. Currently, the following five species of fish and wildlife are listed or are candidates for listing as Federal threatened or endangered species: least tern (endangered), piping plover (threatened), pallid sturgeon (endangered), sturgeon chub (candidate), and sicklefin chub (candidate).

Page 26, Threatened and Endangered Species - The last paragraph of this section should be revised. The paddlefish and the blue sucker are no longer on the candidate list, but are considered species of special concern. The paragraph also states that the pallid sturgeon was listed as an endangered species in 1990 and consultation on the pallid sturgeon is a Federal requirement. The paragraph should be expanded to reflect that this requirement has not been met to date. Consultation was pursued through the Master Manual consultation, but because of project delays will not be completed for several years. Other options are now being discussed by the Corps and the Service.

Page 47, Systems Operations - The first complete paragraph refers to endangered species cycling. This paragraph should explain that endangered species cycling of Gavins Point releases of 1 day up and 2 days down is primarily conducted in support of navigation. When terns and plovers arrive in May, releases are increased to the level needed to support navigation in August. Otherwise, birds nesting at low elevations would be at risk to inundation later when navigation targets require additional discharge. This release scenario supports navigation first and other authorized purposes (e.g. fish and wildlife resources) second, with the exception of flood control.

Page 61, Downstream Reach - The last paragraph includes a discussion on accumulation of sediments at marinas downstream of Gavins Point Dam. I suggest that the Corps explore all opportunities to use sediment removal operations to create tern and plover habitat. These type of projects would fall within the scope of interim conservation measures.

Page 87, Endangered and Threatened Species - The Service acknowledges that the Corps has created some sandbar habitat on the Missouri River system; however, habitat creation efforts, to date, are insufficient and predation continues to be a problem because of insufficient habitat to distribute the birds. The Corps has not provided sufficient information for either the Service or the Tern and Plover Management Team to evaluate low fledge ratios. Also, low fledge ratios likely are related to severe weather, nest inundation, and other factors. However, the Corps has been given the directive in the biological opinion on Missouri River Operations to address each of these areas through management techniques to improve fledge ratios. Service recommendations in the draft biological opinion on the Master Manual provide the Corps with a tern and plover habitat goal to strive for and maintain.

Page 88, Endangered and Threatened Species - The discussion in the first paragraph, and Table XIX on the next page, should be amended to include 1996 data. The last sentence of the second paragraph should be revised to state that birds were raised at the Corps' Gavins Point tern and plover captive rearing facility, not at the Gavins Point Hatchery. All subsequent references to a hatchery should be changed to captive rearing facility.

Pages 88-91, Endangered and Threatened Species - Information reported for the tern and plover salvage operation is not consistent. Total number of eggs salvaged per reach and census numbers by reach should be reported in this section.

Page 92, Summary of Habitat Activities - Although the biological opinion required the Corps to create habitat in 1996, no habitats were created. I recommend that the Corps expand this section with an explanation of why habitat activities were not conducted.

Page 92, Summary of Non-Habitat Activities - The Corps should reference predator management in this section, e.g., nest cages. In addition, the information regarding the release and monitoring of birds is incomplete and inaccurate, and should be revised. For example, all released birds were monitored whether they were radioed or not. Transmitters were placed on 50 birds, 25 terns and 25 plovers. I suggest the Corps add a brief summary of the results of the monitoring effort to this section.

Page 109, Annual Operating Plan, General - The Service supports the recommendations of the Missouri River Natural Resources Committee. We specifically support the elimination of spiking releases at Gavins Point Dam, declining flows throughout the tern and plover nesting season, and minimum flows below the dams.

Page 109, Annual Operating Plan, General - In the second paragraph, the Corps references other avenues of conservation and regulation to try and avoid moving or collecting tern and plover eggs in 1997. These avenues should be identified and discussed further.

Page 115 - Operations During the 1997 Navigation Season - The last sentence in the first full paragraph misrepresents the issue of additional water expended and endangered species operations. Additional water is not needed to benefit endangered species, but to preclude endangered species nesting to primarily support navigation. Increased releases in May to the level needed to support navigation in August, and maintenance of those levels through August actually inundates considerable habitat otherwise used by terns and plovers. The Corps should represent this issue more accurately to the public.

Page 116, Table XXIII - Footnote 3 also misrepresents the issue of additional water expended and endangered species operations. Same comments as above apply.

Page 117. Summary of Reservoir Regulation Activities for Endangered Species and Fish Propagation Enhancement - Relative to the discussion in the first paragraph, the Service does not support a constant flow below Gavins Point during the nesting season. The Service supports high spring flows that decline throughout the nesting season. If the Corps insists on supporting navigation needs over endangered species nesting, the Corps also must recognize that the forecasts for flows needed to support navigation in August change. If forecasts change, particularly early in the tern and plover nesting season, such that lower flows would be required to meet August navigation needs, the Corps should lower releases at Gavins Point in support of nesting terns and plovers. This type of action will benefit the birds in terms of habitat availability.

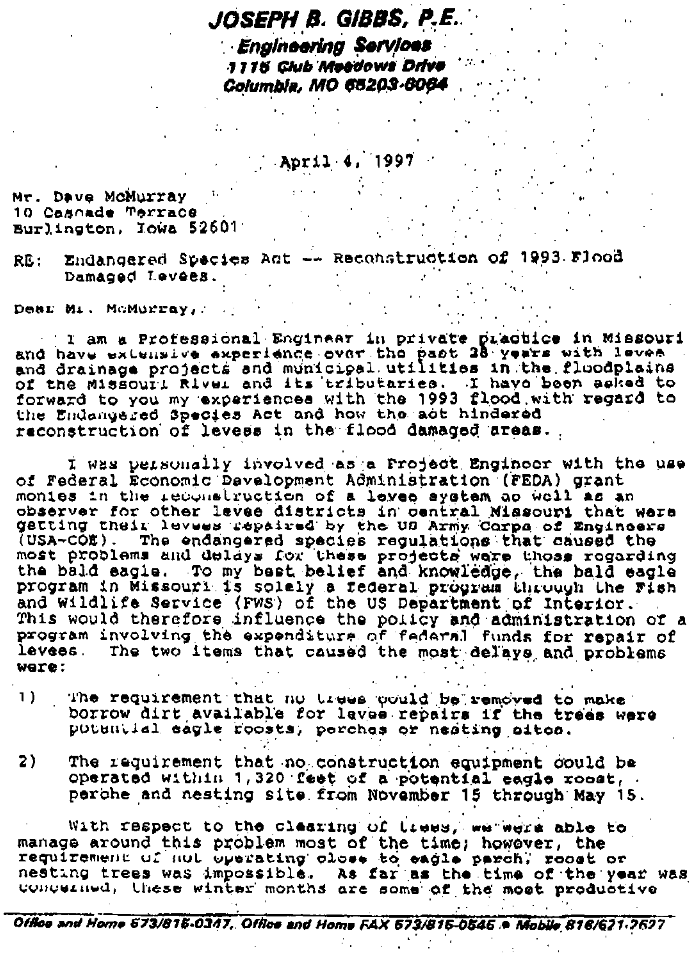
I appreciate the opportunity to comment on the Draft AOP. If you have any questions, please call me (701-250-4481) or Roger Collins (701-250-4481).

Sincerely,

Roger L. Collins

Acting
Allyn J. Sapa
Field Supervisor
North Dakota Field Office

cc: ARD-ES, Denver (60120)
  Field Supervisors, ES
    Columbia, Missouri
    Helena, Montana
    Grand Island, Nebraska
    Manhattan, Kansas
    Pierre, South Dakota
  Sub-Office Coordinator, ES, Billings
  Missouri River Coordinator, FFA, Pierre
  Project Leader, Missouri River FWAO, Bismarck
  Project Leader, Great Plains FWAO, Pierre
  Project Leader, Columbia Fishery Resource Office
  Chairman, Missouri River Nat. Res. Committee, Bismarck
    (Attn: G. Power)



JOSEPH B. GIBBS, P.E.
Engineering Services
1115 Club Meadows Drive
Columbia, MO 65203-8064

April 4, 1997

Mr. Dave McMurray
10 Cascade Terrace
Burlington, Iowa 52601

RE: Endangered Species Act -- Reconstruction of 1993 Flood Damaged Levees.

Dear Mr. McMurray,

I am a Professional Engineer in private practice in Missouri and have extensive experience over the past 28 years with levee and drainage projects and municipal utilities in the floodplains of the Missouri River and its tributaries. I have been asked to forward to you my experiences with the 1993 flood with regard to the Endangered Species Act and how the act hindered reconstruction of levees in the flood damaged areas.

I was personally involved as a Project Engineer with the use of Federal Economic Development Administration (FEDA) grant monies in the reconstruction of a levee system as well as an observer for other levee districts in central Missouri that were getting their levees repaired by the US Army Corps of Engineers (USA-COE). The endangered species regulations that caused the most problems and delays for these projects were those regarding the bald eagle. To my best belief and knowledge, the bald eagle program in Missouri is solely a federal program through the Fish and Wildlife Service (FWS) of the US Department of Interior. This would therefore influence the policy and administration of a program involving the expenditure of federal funds for repair of levees. The two items that caused the most delays and problems were:

1) The requirement that no trees could be removed to make borrow dirt available for levee repairs if the trees were potential eagle roosts, perches or nesting sites.

2) The requirement that no construction equipment could be operated within 1,320 feet of a potential eagle roost, perche and nesting site from November 15 through May 15.

With respect to the clearing of trees, we were able to manage around this problem most of the time; however, the requirement of not operating close to eagle perch, roost or nesting trees was impossible. As far as the time of the year was concerned, these winter months are some of the most productive

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for construction because the river is at a low level which dries out the soils below grade. It was explained to us by the USA-COE and the FWS that if eagles were spotted in the area during these months, construction would have to stop. Work stoppage actually happened on a levee repair project in the winter of 1994 in the Jefferson City, Missouri area because eagles were spotted in the area.

when work is stopped there is always the chance that future weather and ground conditions, that would otherwise have been avoided, could delay work into a period of normal seasonal flooding that would wash away partially completed work. This is not only a waste of money but also creates conditions for destruction of public facilities and unsafe conditions for people working the in area normally protected by the levee system.

As far as my own personal FEDA project was concerned, I had to appeal to my Representative who was able to influence the Secretary of the Interior to provide me with a variance on the set back distance from trees so that construction could proceed without interruption. This appeal took approximately 5 weeks to accomplish when we otherwise would have been proceeding with the project.

In summation, there seems to be a total lack of common sense in the administration of the Endangered Species Act when vital concerns and safety for the general public are considered. If some law needs to be passed so that emergency work projects can be more timely so as prevent monetary waste and unsafe conditions, then I recommend that we should proceed with such a law. If you have any questions, please contact me.

Sincerely yours,

Joseph B. Gibbs

Joseph B. Gibbs, P.E.

JBG/ehg

TESTIMONY OF HERB GUENTHER
EXECUTIVE ASSISTANT
WELLTON-MOHAWK IRRIGATION DISTRICT
COMMITTEE ON RESOURCES
H.R. 478
105TH CONGRESS, 1ST SESSION
APRIL 10, 1997

Mr. Chairman, committee members, my name is Herb Guenther. I am the Executive Assistant for Special Affairs with the Wellton-Mohawk Irrigation and Drainage District (WMIDD) in Wellton, Arizona. We are a political subdivision of the State of Arizona that provides irrigation water, power, drainage and flood protection for the residents and lands in the Wellton-Mohawk Valley. WMIDD is part of the Gila Project authorized by Congress in 1947 to be built by the Bureau of Reclamation. The project was completed and transferred to WMIDD in 1951. We are located along the Gila River in Southwestern Arizona, approximately 30 miles east of Yuma, Arizona. We operate and maintain the infrastructure necessary to provide Colorado River water to irrigate 62,500 acres of prime agricultural land. The fertile agricultural land is located along both sides of the Gila River for a distance of about 60 miles.

The Gila River in the WMIDD is comprised of the surplus flows of the Salt and Gila Rivers which drain a watershed of approximately 50,800 square miles. The Gila River in the WMIDD is normally a dry river bed that only receives flow when the numerous upstream reservoirs fill and spill or excessively heavy local precipitation causes the desert washes to run.

In 1959, the United States Corps of Engineers (USACE) completed Painted Rock Dam, 57 miles upstream from the WMIDD, to provide flood protection for WMIDD, Yuma, the Imperial Valley of California and Mexico. As part of the Painted Rock Reservoir Project, Congress authorized a flood control channel to be built from Painted Rock Dam to the confluence of the Gila River with the Colorado River. That flood channel project was never funded due to unfounded environmental concerns and changing benefit/cost considerations.

In 1973, following a damaging flood, the WMIDD began considering alternatives to provide flood protection from the Gila River. In 1984 following an exhaustive environmental compliance marathon, the WMIDD began construction of a scaled down flood control channel and levee project to protect irrigation infrastructure, adjacent farmlands , transportation facilities and local communities from Gila River flooding. The USBR provided partial funding and environmental compliance assistance. Environmental compliance included the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), section 404 of the Clean Water Act (CWA) and the National Historic Preservation Act (NHPA). The Project was issued a 404 CWA Permit on the basis of an environmental assessment and a fully mitigated finding of no significant impact (FONSI). The flood control project was designed to safely handle a 10,000 cubic feet per second (cfs) flow.

In January 1993 the flood control project was 98% complete. Following a series of severe winter storms, all upstream reservoirs were full and surplus water began to fill Painted Rock Reservoir. By the end of February 1993, Painted Rock Reservoir had filled to capacity (2.5 million acre feet) and began to spill, eventually reaching a peak uncontrolled spill of 25,800 cfs. Despite a tremendous flood fighting effort, the downstream flood control project was heavily damaged by this 500-year flood event (0.2% annual chance of occurrence). Flood flows lasted more than 11 months, finally ending in late November 1993. In the end, 65% of the levee project was destroyed and substantial damage was suffered by irrigation and drainage facilities, roadways, bridges, power facilities and private property. Damage to public facilities alone in the WMIDD exceeded $100 million, exclusive of highways and bridges. The area had been declared a Major Federal Disaster Area. Because of the level of damage and the increased vulnerability to future flood flows, WMIDD immediately applied for disaster assistance under the Robert T. Stafford Disaster Relief Act (Public Law 93-228).

Due to accretion (gradual change) and avulsion (sudden change) of the river channel during the flood, the course of the Gila River had changed location as much as a mile at some locations within the WMIDD. The river now occupied large areas of land that were prime farmland before the flood. Nearly 10,000 acres of farmland were damaged by the flooding with more than 2,000 acres damaged beyond reasonable repair. This new river alignment significantly complicated the process of restoring flood protection.

Implementation of the Stafford Act is overseen by the Federal Emergency Management Agency (FEMA). In October 1993, at the request of FEMA, the WMIDD did a cost comparison analysis of restoring the flood protection facilities along the post-disaster river alignment versus returning the river to its pre-disaster location. The analysis demonstrated that it was less costly to use the post-disaster alignment which was also the alternative favored from an environmental viewpoint. FEMA directed the WMIDD to proceed with the design and environmental compliance for the restoration of flood protection facilities along the post-disaster alignment.

In December 1993, FEMA and USACE determined that the portion of the project located "within the waters of the U.S." would require permits under sections 404 and 401 of the CWA and that the remainder of the project would require clearance under NEPA. The USACE was designated as the lead Federal agency for environmental compliance.

In January 1994, WMIDD working under the guidance of FEMA and USACE, organized the Interagency Working Group (IWG) to scope the project and assist with environmental compliance activities.

Compliance activities included:
- Clean Water Act - Sections 401 and 404 (CWA)
- National Environmental Policy Act (NEPA)
- Endangered Species Act (ESA)
- National Historic Preservation Act (NHPA)
- Executive Order 11990 - Protection of Wetlands
- Executive Order 11988 - Floodplain Management

The Interagency Working Group included:
- U.S. Army Corps of Engineers (USACE)
- Federal Emergency Management Agency (FEMA)
- U.S. Fish and Wildlife Service (USFWS)
- U.S. Bureau of Reclamation (USBR)
- U.S. Environmental Protection Agency (USEPA)
- Arizona Department of Environmental Quality (ADEQ)
- Arizona Game and Fish Department (AGFD)
- Arizona Division of Emergency Management (ADEM)
- Bookman-Edmonston Engineering, Inc. (consultant)
- Resource Management International, Inc. (consultant)
- WESCO (consultant)

The Interagency Working Group (IWG) held 12 meetings between January 1994 and February 1995. In March 1995 the USACE issued a finding of no significant impact (FONSI) based on a fully mitigated project. The final environmental assessment (EA) and the FONSI were noticed and made available for public review during March and April 1995. In May 1995 the USACE issued the CWA 404 Permit with the support of all the Interagency Working Group except the USEPA. The USEPA continued to demand that USACE and FEMA prepare an environmental impact statement (EIS) even after 3 months of repeated attempts by the IWG to address their unfounded concerns.

With regard to this project, compliance with the Endangered Species Act was not a major issue. While the endangered Yuma Clapper Rail was found in the area prior to the 1993 flood event, the complete decimation of all potential habitats during the disaster precluded a finding of effect and thereby avoided a lengthy section 7 consultation. The post-disaster environment resembled a moonscape with nothing but debris littered sandbars occupying most of the river bottom.

Compliance with section 106 of the National Historic Preservation Act was a different matter. Our primary rock quarry located at Antelope Hill had undergone two previous 106 compliance assessments with a finding of no effect. However the mountain on which the quarry was located had been found to be eligible for listing on the National Register of Historic Places due to a large amount of rock art (petroglyphs) found on parts of the mountain. In addition, unknown to WMIDD, subsequent archaeological investigations had found the presence of ancient milling sites where Native American Tribes had quarried stone for the production of tools used for grinding. Since the area was Register Eligible the statute required additional consultation with the Native American Tribes and the Council on Historic Preservation. Part of the consultation with the Native Americans involved asking them if the mountain was a Traditional Cultural Property in the view of their tribes. Predictably, the majority answered in the affirmative which led to an additional intense and convoluted process. Now more than three and one half years into the process, we have yet to receive permission to continue our quarry activities to develop shot rock for the.revetment of our restored levees.

In June 1995, after being stimulated by employees of the USEPA, the Southwest Center for Biological Diversity (SCBD), Defenders of Wildlife (DOW) and the Public Employees for Environmental Responsibility (PEER) filed suit against USACE in U.S. District Court seeking to enjoin the project and force preparation of an EIS. The WMIDD filed a motion to intervene in the lawsuit in July 1995.

In August 1995, FEMA withdrew from further participation in the flood protection restoration project citing their new levee policy and dual Federal authorities as their justification. They subsequently deobligated all funding thereby leaving the disaster recovery effort without a source of funding. The dual authority FEMA cited was the PL 84-99 authority of USACE. However, the PL 84-99 program had not been implemented in Arizona and was not available in-lieu of the Stafford Act. WMIDD filed a formal appeal of FEMA's decision. In December 1995, the WMIDD was granted intervenor status in the lawsuit against the USACE. WMIDD quickly filed a motion for a summary judgment on the basis that the plaintiffs lacked standing. The Southwest Center for Biological Diversity gave 60 day notice to USACE that they intended to file an additional litigation claiming a violation of the CWA and the ESA.

In November 1995 FEMA agreed to reconsider the eligibility of the flood protection restoration project for a limited grant under the Stafford Act if the project could demonstrate a favorable benefit/cost ratio based solely on Federal benefits. In May 1996 FEMA completed the benefit/cost analysis and agreed to partially fund the project if WMIDD complied with some additional requirements regarding NEPA, NHPA and Executive Order 11988.

In July 1996 the Federal District Court issued a summary judgment in favor of the defendants on the basis that the plaintiffs lack standing. The plaintiffs immediately filed a motion for an injunction and an emergency appeal with the Ninth Circuit Court of Appeals. In September the 9th Circuit denied the motion seeking an injunction and an emergency appeal but agreed to an expedited appeal. The 9th Circuit Court of Appeals heard arguments on the appeal February 12, 1997 but has yet to issue a ruling. WMIDD to date has spent in excess of $160,000 on legal fees associated with this litigation.

In November 1996 WMIDD completed a treatment plan and memorandum of agreement (MOA) for the Antelope Hill Quarry to complete the section 106 requirements of the NHPA. In January 1997 FEMA became a signatory to the MOA.

In December 1996 WMIDD petitioned the Yuma County Flood Control District Board of Directors to amend the flood control ordinances consistent with FEMA's requirements under Executive Order 11988. The flood control ordinances were successfully amended in February 1997.

In March 1997 FEMA issued a supplemental environmental assessment (SEA) and finding of no significant impact (FONSI) under NEPA for the flood protection restoration project. The SEA and FONSI are currently undergoing a 30 day public review process. The Southwest Center for Biological Diversity is already threatening additional litigation.

The bottom line is, when it comes to restoring flood protection facilities, the disaster assistance program is broken. The environmental statutes assisted by regulatory creep preclude the timely restoration of any facility located in floodplain. Our project is not a new project. It is merely the restoration of flood protection to the same level that existed before the 1993 flood disaster. The pre-disaster project had been fully permitted and mitigated. All we were asking for was some assistance in restoring flood protection to a devastated area, so the residents could once again enjoy some predictability in their lives. It is now almost 4 years since we began the environmental clearance process. Federal, State and local interests have invested nearly $43 million in irrigation, drainage and power infrastructure restoration. Private individuals have invested millions more dollars in restoring their farms and homes. Millions of Federal and State dollars have been spent restoring highways and bridges. And today, all that investment remains in jeopardy because of a poorly defined Federal program and totally unnecessary and unreasonable environmental regulatory requirements that preclude the restoration of flood protection.

The current system:
1. Precludes the timely restoration of flood protection.
2. Continues to jeopardize the Federal, State and local investment in other restored public infrastructure.
3. Invites litigation from special interest groups that wish to obstruct projects or have a separate agenda.
4. Causes unnecessary expense and delay in dealing with environmental issues that have no meaningful application in disaster situations.
5. Prevents disaster victims from restoring normalcy and predictability to their lives.

H.R. 478 is a step in the right direction but it falls short of many of the obstacles that frustrate disaster recovery efforts. There must be clear-cut Federal Agency responsibilities as they relate to restoration of flood protection facilities. There must be exemptions or greatly expedited environmental compliance processes involving not only the ESA, but also the broader requirements of NEPA, CWA, NHPA, EO 11988 and EO 11990. Perhaps a multi-agency disaster task force could be established to convene in the event of a disaster and decide on the spot, what sensitive environmental concerns need to be addressed, what restrictions or guidelines need to be implemented and what mitigation, if any, is appropriate. These agency experts would need to have sole decision making authority. Lastly, we need to take some definitive action to eliminate the regulatory creep and legal fiction that results from the agencies and the courts trying to further define the intent of Congress. There needs to be a review of these acts from time to time, along with the applicable regulations and case law to determine if a clarification of intent is warranted. Only in this way can we keep the intent focused and the requirements reasonable.

I thank you for the opportunity to testify on this issue. I would be happy to try to answer any questions that you might have.

TESTIMONY OF
SHANNON E. CUNNIFF
DEPUTY EXECUTIVE DIRECTOR, FLOODPLAIN MANAGEMENT REVIEW COMMITTEE BEFORE THE HOUSE RESOURCES COMMITTEE
APRIL 10, 1997

Thank you Chairman Young and Committee members for giving me the opportunity to testify before the House Resources Committee on the findings of the Interagency Floodplain Management Review Committee on the 1993 Floods. I would like to submit a copy of my written testimony into the Records. I have provided a copy of the Committee's report as an exhibit.

In 1993 the Midwest was hit by disastrous flooding. That flooding caused approximately $12 - 16 billion in damages and the loss of at least 38 lives. It was a flood of record and one of the most costly natural disasters in our nation's history and it led many to question how the nation manages its floodplains.

As one of the responses to the flood, the Administration' s Floodplain Management Task Force, chartered the Interagency Floodplain Management Review Committee to undertake an extensive independent review. Our charge included:

> Determining the major causes and consequences of the Midwest floods of 1993;
>
> Evaluating the performance of existing floodplain management and related watershed management programs; and,
>
> Recommending changes in current polices, programs, and activities that would most effectively achieve risk reduction, economic efficiency and environmental enhancement in the floodplain and related watershed.

The US Army Corps of Engineers, Federal Emergency Management Agency, Environmental Protection Agency, US Fish and Wildlife Service, and the US Department of Agriculture provided experts to participate on the Review Committee. The Review Committee was supported by staffs of the Council on Environmental Quality, the Council of Economic Advisors, the Department of Commerce, the Department of Justice, and the Tennessee Valley Authority. The Review Committee was also supported by the Scientific Assessment and Strategy Team, which also was established by the Administration's Task Force. The SAST, as it became known, was directed by Dr. John Kelmelis of the US Geological Survey and was comprised of scientists and engineers, from the above mentioned and other agencies, with a broad range of expertise in flood control, river basin and ecosystem management. The SAST developed information and provided scientific advice on approaches to flood damage reduction in the Midwest.

While numerous federal agencies provided staff to these committees, the Committee was given broad discretion to operate independently from the agencies. Accordingly, the recommendations in the Committee's report, entitled, *Sharing the Challenge: Floodplain Management into the 21st*

Century, are those of the Committee's and not the agencies' staffing the Committee. I am here today to report in my role as the Deputy Executive Director of the Review Committee. I have brought with me copies of the report which I encourage anyone interested in these issues to read. I would like to submit the report into the record.

The Review Committee conducted its activities from January through June 1994. Working through the offices of the governors of the nine flood-affected states, the Review Committee met with state and local officials and visited over 60 locations. We also made extensive contacts with federal agencies, interest groups, members of Congress and their staffs, and numerous private citizens who expressed an interest in the flood. The Review Committee's Report is based on research and interviews with agency personnel, Governors, state and community representatives, non-governmental organizations, businesses, farmers, and residents of the floodplains.

The Midwest Floods of 1993 and 1995, and floods that have occurred in nearly every region of the nation since 1993, demonstrate that people and property located in floodplains remain at risk. Floods are natural repetitive phenomena. Considering the nation's short history of hydrologic record-keeping as well as the limited knowledge of long-term weather patterns, flood recurrence intervals are difficult to predict.

Activities in floodplains, even with levee protection, continue to remain at risk. Measures to avoid the risks of flooding and measures to reduce the risks of flooding are very compatible with environmental protection and vice versa. In fact, protection and restoration of the natural and beneficial functions and values of floodplains is a crucial element of any plan to reduce risk and damage from floods.

Findings of the Review Committee Pertaining to Flood Causes and Levee Maintenance

The Review Committee found that, where implemented, flood damage reduction projects and floodplain management programs worked essentially as designed and significantly reduced the damages to population centers, agriculture, and industry in the Midwest.

- Reservoirs and levees built by the Corps prevented more than an estimated $19 billion in potential damages in 1993. Large areas of Kansas City and St. Louis were spared the ravages of the flood, although several suburbs suffered heavy damages.
- Watershed projects built by the Natural Resources Conservation Service saved an estimated additional $400 Million.
- Land use controls required by the National Flood Insurance Program (NFIP) and state floodplain management programs reduced the number of structures at risk throughout the basin.

The current flood damage reduction system in the upper Mississippi River Basin represents a loose aggregation of federal, local, and private levees and reservoirs. This aggregation does not ensure the desired reduction in the vulnerability of floodplain activities to damages. Simply put: Many levees are poorly sited and will fail again in the future and the levee system lacks coordinated planning and management.

Federal Levees

The Review Committee found that most of the Corps levees performed as designed and prevented significant damage. A subsequent 1995 report by the General Accounting Office[1] found that of the 181 Corps levees reviewed, 177 levees clearly performed up to their design capacity and sometimes exceeded it during the 1993 flood. Many levees withstood flows that, in some cases, were greater than those for which the levees had been designed because flood fight efforts extended their performance by raising their height. In addition many experienced saturation far longer than they were designed to do. Of those 177 levees which performed as expected, the flood eventually exceeded the design capacity of 32 levees and overtopped them. Only 4 Corps levees allowed floodwater to enter the protected floodplain, but this occurred after flood waters rose above and remained at levels beyond the duration for which the levees had been designed. Under seepage and the use of river sand in previous repairs were causative factors.

Non-Federal Levees

Many locally constructed levees breached and/or overtopped. Frequently, these events resulted in considerable damage to the land behind the levees through scour and deposition. Most of these levees were smaller than Corps levees and not designed, if they were designed at all, to withstand the magnitude and duration of flooding that occurred.

The present system of agricultural flood damage reduction levees along the lower Missouri River floodplain is an aggregate of levees constructed by different agencies and individuals at various times and under various programs.[2] Their physical composition, elevation above the river channel and locations vary from area to area. Similarly, their degree of maintenance varied. Some levees are on or near the channel bank and extend across old river-channel deposits. Others are setback of the landward margin of the high-energy flood plain. In some areas, multiple levees have been built successively toward the river during the past four decades. Many levees have a river side fringe of riparian forest on the active floodplain. Many districts with levees designed for high magnitude floods have been flooded between 5 and 10 times during the past 50 years. This history reflects on the location and the design capacity of these levees.

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[1] GAO, 1995 Midwest Flood: Information on the Performance, Effects, and Control of Levees (GAO/RCED-95-125)

[2] Missouri River Basin Commission, 1982

The majority of levee breaks resulting from the 1993 flood were associated with one or more of the following floodplain settings:

1) areas occupied by one or more active channel within the past 120 years (72%)[3]

2) channel banks at the downstream end of tight meander loops (17%)

3) areas along tributary channels subjected to significant cross flow conditions during flooding (17%)

4) areas along chutes (i.e., minor subsidiary channels) (8%)

Part V of the Review Committee's report, prepared by the SAST, notes that eyewitness accounts indicated that the majority of levee breaches were caused by overtopping, subsequent incision by gullies, and rapid flood-flow erosion. However, levee failures may have also been caused by underflow and piping beneath the levee (as manifested by sand boils along the landward base of the levee), and by interflow and piping within the levee structure itself (resulting in levee failure by either gullying or slumping of the levee face). The levee districts and individuals, in responding to a SAST questionnaire, attributed levee damage to all of these erosional processes.

Factors thought to contribute to levee breaks along the Missouri and Mississippi Rivers include:

1) channel banks subject to high energy flows conditions at
   a) downstream banks of meanders between points of initiation and inflection and
   b) channel banks opposite deflecting cross flows on tributary, chute or flood channels

2) levee irregularities and or discontinuities at
   a) high angle junctions between levee segments, and
   b) repaired levees that ring old leveed scour holes

3) inadequate levee design, construction and repair;

4) highly permeable substrata composed of channel sand deposits with or without a thin silt-clay cap; and,

5) inadequate levee maintenance.

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[3] The percentage indicates relative abundance within the 225 mile reach between Glasgow and St Louis, Missouri.

We did not find, nor were we told of, any situations where environmental protection statutes were the reason for inadequate maintenance.

We encountered some individuals who complained that they felt that time to receive approvals for repair of levees was excessive. However, many others specifically noted their satisfaction with the speed of approval and repair work.

Some thought that the conditions involved with obtaining approvals were irrational. For example, I personally recall a farmer that complained about having to get fill material from two miles away instead of from the riparian habitat adjacent to the levee. Such a condition, in my opinion, has both an engineering and floodplain management rationale. The more remote site for borrow contained material that needed minimal processing before placement in the levee (i.e., removal of tree roots was not necessary). The use of the remote site also avoided impacts to valuable floodplain habitat.

On the Upper Mississippi protection and recovery of federally listed endangered species has not thwarted levee repair or maintenance. The endangered species that might come into play are two endangered freshwater mussels, a flower, the Indiana bat, pallid sturgeon, and the bald eagle. The mussels beds are well known and hydraulic dredging (to obtain fill material for the levee repair) was not proposed in there areas or the areas were simply avoided. The flower, a decurrent false aster, was also present in several areas requiring repair, but avoidance was possible and resulted in no delay or impact to repair schedules. In the case of the Indiana bat, which nests in trees along the river, levee repairs could be scheduled around the sensitive brooding period or did not involve the type of forested habitat used by the bats. The pallid sturgeon is present in areas where earth filled levees exist, so therefore the removal of borrow material from aquatic habitats was not necessary and presented no delay or hardship to levee sponsors. With respect to our nation's symbol, the bald eagle, there were also no conflicts. Either the eagles' preferred nesting habitat was unsuitable location from which to obtain material for the levee repairs or the eagles' winter distribution did not significantly overlap the construction season.

The Review Committee proposed authorization and funding of a federal program for major maintenance and major rehabilitation of levees to ensure the integrity of levees in the basin. This program would address both federally built/locally maintained levees and locally built/locally maintained levees. In summary, we proposed that for a levee to become eligible for participation in the program, state and local sponsors would agree to participate in the National Flood and Crop Insurance Programs, share in the costs of repair or realignment of levees, and agree to coordinate flood fight actions with the Corps. The proposal was developed to provide assistance that would ensure the integrity of non-federal levees, encourage state-led floodplain management activities and better coordinate activities in floodplains, reduce the risk of flood damages should an event occur in excess of the design capacity of the non-federal levees, and over the long-term reduce federal costs stemming from flood response and recovery activities.

Overview of the Recommendations of the Review Committee

The Interagency Floodplain Management Review Committee proposed a number of ways to improve management of the nation's floodplains. A dominant theme in the Review Committee's report is that all levels of government, all businesses, and all citizens interested in the floodplain should have a stake in properly managing this resource. All of those whose activities are at risk or create risk, either directly or indirectly, must share in the management and the cost of reducing the risk.

The federal government must lead by example. State and local governments must manage the floodplains. Individual citizens must adjust their choices and actions to the risk they face.

The Review Committee supported an approach to flood damage reduction through floodplain management that would replace the historic focus primarily on structural "flood control" solutions with a sequential strategy of avoidance, minimization and mitigation.

In many cases, by controlling runoff, managing ecosystems for all their benefits, planning the use of land, and identifying those areas at risk, the hazard can be avoided. Where the risk cannot be avoided, damage minimization approaches, such as elevation and relocation of buildings, and construction of reservoirs or flood protection structures. However this should be done only when they are integrated into an overall, basin-wide systems approach to flood damage reduction.

A systems approach necessitates the development, use and sharing of scientific data in the alternatives analysis and decision-making process. Floodplain managers require easy access to current and historical information about natural and constructed features, cultural resources, ecological resources, geography, climatology and hydrology of the basins in which they operate. Recent advances in computer modeling, high resolution remote sensing and geographic information systems offer important means to analyze and share information about options and risks. These scientific and technical tools need to become commonly applied by floodplain managers across the nation.

Over the last 30 years the nation has learned that effective floodplain management can reduce vulnerability to damages and create a balance among natural and human uses of floodplains and their related watersheds to meet the social, economic and environmental goals of the nation. The nation, however, has not taken advantage of this capability. Floods will happen. The goal of the nation should be to minimize the risk of damage from floods.

The needed tools, authorities and programs are available at the federal, state, tribal, and local level to move toward accomplishments of these goals. Many of the nation's past activities related to floodplain and disaster recovery make sense, produce desirable results, and should be continued. Others do not and should be stopped.

While many aspects of the nation's programs are in need of modification, the problem is not one of lack of understanding of how to manage floodplains and their associated watersheds. It is a problem of will and organization. As the Director of the Review Committee, Dr. Gerry Galloway, would often say, "There are no silver bullets in the floodplain management business". No single action will suddenly reduce the vulnerability of those who are currently at risk or stave off placing others in the same position.

If the nation is to move ahead in reducing flood damages and reducing the costs to the federal, state, and tribal governments, and the communities and individuals stemming from flooding, it must do so in a manner that recognizes the many stakeholders in the floodplain management effort and appropriately divides the responsibilities among them. Responsibility for navigation, flood-damage reduction, floodplain management and ecosystem management is divided among several programs at both the state and federal level. As was demonstrated clearly in 1993 and in so many other floods before and after that, the fragmented approach is not sufficiently effective in reducing risks. A more coordinated strategy for effective management of the water and related land is needed.

To take full advantage of existing federal programs which enhance the floodplain environment and provide for natural storage in bottom lands and uplands, the Review Committee recommended:

> Legislative authority to increase post-disaster flexibility in the execution of the land acquisition programs;
>
> Increased attention to the environment -- the natural beneficial functions and values of floodplains -- in federal operation and maintenance and disaster recovery activities including land acquisition; and
>
> Funding and expansion of existing authorities to acquire lands, from willing sellers, needed to reduce the risk of flood damage.

To reduce the vulnerability to flood damages by those in the floodplain, the Review Committee recommended that:

> Full consideration be given to all possible alternatives for vulnerability reduction, including permanent evacuation of flood prone areas, flood proofing of structures remaining in the floodplain, creation of additional natural and artificial storage, and adequately sized and maintained levees and other structures.
>
> Where appropriate and economically justified, the vulnerability of population centers and critical infrastructure can be reduced through use of floodplain management activities and programs to provide protection to the standard project flood discharge.

> To ensure the integrity of levees and the environmental and hydraulic efficiencies of the floodplain, states and tribes should ensure proper siting, construction, and maintenance of non-federal levees.

I would like to end with this thought. The flood of 1993 was an unprecedented hydro-meteorological event, but that doesn't mean that it can't happen again. Floods will continue to occur. Although we can't predict or stop floods, we can adopt a new approach to floodplain management that will lessen the vulnerability of our nation to the costly damages and expenses that occur during and following floods.

I am now prepared to answer any questions that the committee may have.

WALTER COOK
Attorney at Law (Ret.)
42 Northwood Commons
Chico, CA 95973

Apr 7, 1997

Hon. Don Young, Chairman
House of Representatives
Committee on Resources

Subject: COMMITTEE OVERSIGHT HEARING ON THE IMPLEMENTATION OF THE ENDANGERED SPECIES ACT. Thursday, April 10, 1997, Teleconference remote site at 9:00 a.m. Pacific Time in Room 317, State Capitol, Sacramento, California.

Dear Chairman Young:

FOLLOWING IS MY WRITTEN TESTIMONY FOR PRESENTATION TO YOUR COMMITTEE AT THE ABOVE HEARING:

My name is Walter Cook. I reside at 42 Northwood Commons, Chico, CA. I am a retired Attorney at Law, having engaged in private practice in Sacramento. I also served for many years as Staff Counsel for the Calif. State Lands Commission.

I have owned a walnut orchard adjacent to the Feather River levee in Yuba County since 1976. The orchard is located on Country Club Road at the site of the Arboga levee break of January 2, 1997. About a third of the orchard soil and trees were washed away by the torrential flood current flowing from the break. The current formed a deep lake extending into my orchard from the landward toe of the repaired levee. The remainder contains many toppled walnut trees and is covered by about eight feet of sand. My brick house, shop, and mobile home were destroyed by the force of uprooted mature walnut trees pushed along by the flood waters.

Since the flood, I have been concerned about politicians and others who have been using the flood, not to foster a rational discussion of serious flood control and flood plain management issues, but instead, as a vehicle to further their basic antagonism toward the Endangered Species Act.

For example, California State Assemblyman Bernie Richter has been quoted in the Chico Enterprise Record Newspaper as having called on Congress to exempt levees from the Act. Mr. Richter claims that the Arboga levee break was caused by a federally required mitigation pond "created adjacent to the levee" as part of an 80 acre refuge to protect the endangered Elderberry Bark Beetle. Government officials were said to have "run amok," and he charged that the US Fish & Wildlife Service "bears much of the blame for the deaths of three constituents." Federal

Agencies are accused of causing tens of millions of dollars in damages.

As far as I'm concerned, such serious and reckless charges of this nature against people doing their jobs is Not what should be expected from our public servants.

The erroneous nature of the claims would clearly be established by any objective examination of what really happened. A cursory examination of the site shows that rather than being adjacent to the levee, the pond was constructed several hundred yards out into the floodway of the Feather River. It was about three quarters of a mile upstream from the break. The pond cannot even be seen from the break. Those blaming the beetle for the flood have not adequately explained how such a remote activity as the pond could have caused the levee break. The Army Corps, itself, feels that the pond is not a problem.

Enclosed is a copy of a plat of the mitigation area, marked Exhibit A. I have taken the liberty of marking in the pond, the streets, and the area of the break. I would be happy to show the area of the break and the pond to anyone who might be interested.

While the beetle was seized on as the culprit, possible causes of the break which are far less remote have been ignored. A few of these are discussed, as follows:

1. In the first place, there has been a history of serious levee erosion at the waterward toe of the levee. After the 1986 flood, I observed eroded trenches on the river side of the levee in the vicinity of the 1997 break. These trenches were deep enough to hide a semi-truck and trailer. They were below the water level and could not be seen until after the water receded.

After the 1997 flood waters had receded, I noticed a similar, but smaller, trench just downstream from the break. It is possible that levee erosion was the cause of the current break. However, with everything gone, there is no way to tell if this was the case.

While some contend that the remote pond opened an aquifer which permitted water to flow under the levees. The river channel itself, is deeper than the pond and closer to the break. If an aquifer is the problem, these facts, together with the likely deep erosion at the very base of the levee would be far more likely to have caused any possible underground flows than the far away pond.

2. It has also been incorrectly stated that the mitigation work caused levee repairs to be delayed. This was not the case

at the the Country Club Road levee. Repairs were actually made in 1989. A 1000 foot, 10 foot deep toe drain was dug at the landward foot of the levee, at the precise location of the 1997 break. I do not know if the toe drain weakened the levee and caused the break. However, it is clear that repairing the levee at this location was not delayed by the beetle. It is also clear that the toe drains did not prevent the break. Instead of railing against the ESA, it would appear far more productive to re-evaluate whether toe drains actually strengthen a levee.

3. It is also possible that the break was caused by the original mis-location of the levee over an old bed of the river. I understand that the levee is located on deep river sand and gravel which permits water to flow under the levee. The State Department of Water Resources has made borings through the Country Club Road levee in recent years. Their records should show the extent to which the levee was built on porous material.

4. It has also been argued that the Endangered Species Act prevented proper inspection and maintenance of the levee thereby causing the levee to be weakened. This also appears to be falacious. Since 1976, I have observed annual controlled burning of the entire levee surface. With all vegetation gone, any defects in the levee became obvious. The burned levee banks were often smoothed out with heavy equipment. If the need for further maintenance would have become visible, I know of no reason it could not have been accomplished, except perhaps, a possible shortage of funds.

5. Insofar as any claim that Phase II of the federal levee program was held up for the mitigation work, this also does not appear to square with the facts. On the one hand, the mitigation work would have been at a relative lower cost and did not require a great deal of planning, land acquisition, engineering and construction work. It seems that this relatively minor work could easilly be completed without disrupting the schedule for the major levee work.

As distinguished from the mitigation work, the effort and expense of upgrading some 30 miles of levees is a major undertaking. It was necessary to conduct full and complete studies to insure the adequacy of the work. I also understand that with limited funds, Phase I in the Sacramento area was completed first, while studies continued on Phase II. In addition, the Yuba County Water Agency sought changes in Phase II. I do not know the extent to which this may have delayed the project.

6. One of the likely causes of the levee break is the fact that the Feather River flows exceeded the downgraded flood protection capacity of the recently re-evaluated levee system.

The January Feather River flood flow between the Yuba and Bear Rivers was approximately 300,000 cubic feet per second, more or less. This flow was at the original design capacity prior to reevaluation. Since they were originally built, major problems with design, siting and construction have been indicated. The Army Corps of Engineers in its Sacramento river Flood Control System Evaluation, Phase II - Marysville/Yuba City area, Draft Environmental Assessment/Initial Study, published in November of 1992, at page 6, states that without levee reconstruction, the maximum flows are only 268,000 cfs with a recurrence Interval of 70 years. The Yuba River levees are shown to have only 30 year protection. Phase II levee recostruction would have included levee raising, stability berms, and slurry walls in some location.

Despite the fact that the January 2nd excessive flows would likely result in a levee breach at some location, no evacuation was ordered for South Yuba County. No prior advice to the residents to seek flood insurance was provided at any time after the 1992 report established the weakened condition of the levees. In fact, the Plumas Lake Major Development in the area likely to be flooded was approved. Neither FEMA nor Yuba County have taken any action to re-map Arboga into the flood plain under the National Flood Insurance Program, as would ordinarilly be the case for communities that have only 30 to 70 year protection.

In summary, the attempt to eliminate the ESA for flood control work constitutes a red herring. HR 478 will have the effect of eliminating all flood control environmental considerations, even for private levees, and yet it will not contribute to more effective flood control. The trade off, on the one hand, is between creating Los Angeles Rivers out of the flood plains in a vain attempt at flood control, while on the other,working for sensible flood control while retaining waterways that are alive and a part of our heritage. We should respect the strength of our waterways, and let the river be the river.

Some proper flood control measures that cry out for consideration include the following:

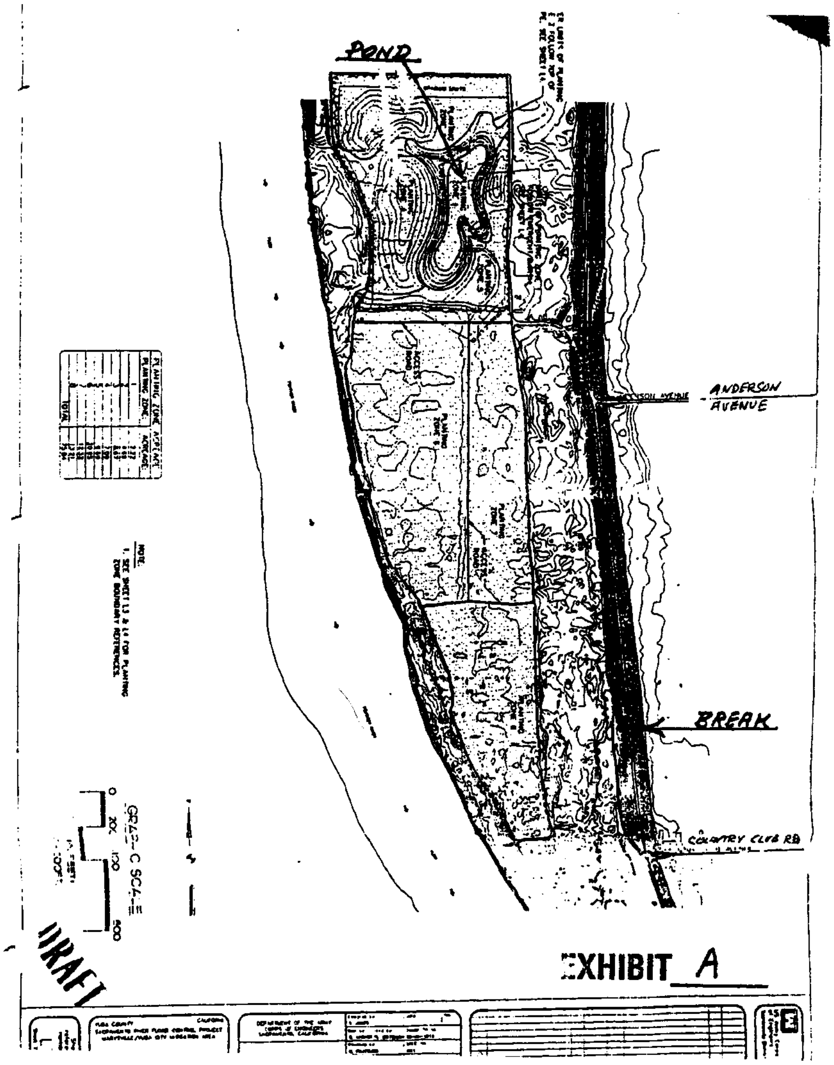
a. Sensible flood plain management. Using flood plains for large residential and other developments should be discouraged.
b. Levees should be sited in areas where they can effectively do their job. Constructing levees across old river beds is not logical.
c. Perimeter and cross levees should be in future flood control plans. Combining long agricultural levees to protect urban areas should be avoided.
d. Existing urban areas should be protected with high quality levees.
e. Levee setbacks and bypasses to increase river flow

capacity should also be a part of future flood control plans.

Respectfully Submitted

Walter Cook

WALTER COOK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0 200 400 800
DRAFT
EXHIBIT A

City
of
YUBA CITY

April 4, 1997

The Honorable Congressman Richard Pombo
2495 March Lane, #104
Stockton, CA 95207

The Honorable Congressman Wally Herger
55 Independence Circle, #104
Chico, CA 95973

Dear Congressman Pombo and Congressman Herger:

RE: ***HR 478***

As Mayor of the City of Yuba City, I would like to go on record in support of your bill, HR 478.

During the recent floods in Sutter County it became apparent that we must protect, repair and restore our existing levee system without the interference of the National Environmental Protection Act or the Endangered Species Act. Human life and property should take precedence, and basic common sense should prevail when clearing vegetation from levees. Unless maintenance and flood watch crews can physically see on both sides of the levee to the toe, seepage water and holes can ultimately wash out levees, endangering lives and property. Your bill will greatly expedite the emergency repair work that needs to be completed on the California levee systems without the extended delays to satisfy all the environmental interests.

Please forward our support of HR 478 to the appropriate committee.

Sincerely,

Karen Cartoscelli rn

Karen Cartoscelli, R.N.
Mayor

/eg

To: U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON RESOURCES
Hon. Don Young, Chairman

Subject: WALTER COOK TESTIMONY
Supplemental Information
Oversight Hearing, April 10, 1997
Implementation of Endangered Species Act
Teleconference Remote Site
Room 317, Calif. State Capitol
Sacramento, CA

Dear Chairman Young:

The following information is submitted with my request that it be included in the Record of this Hearing.

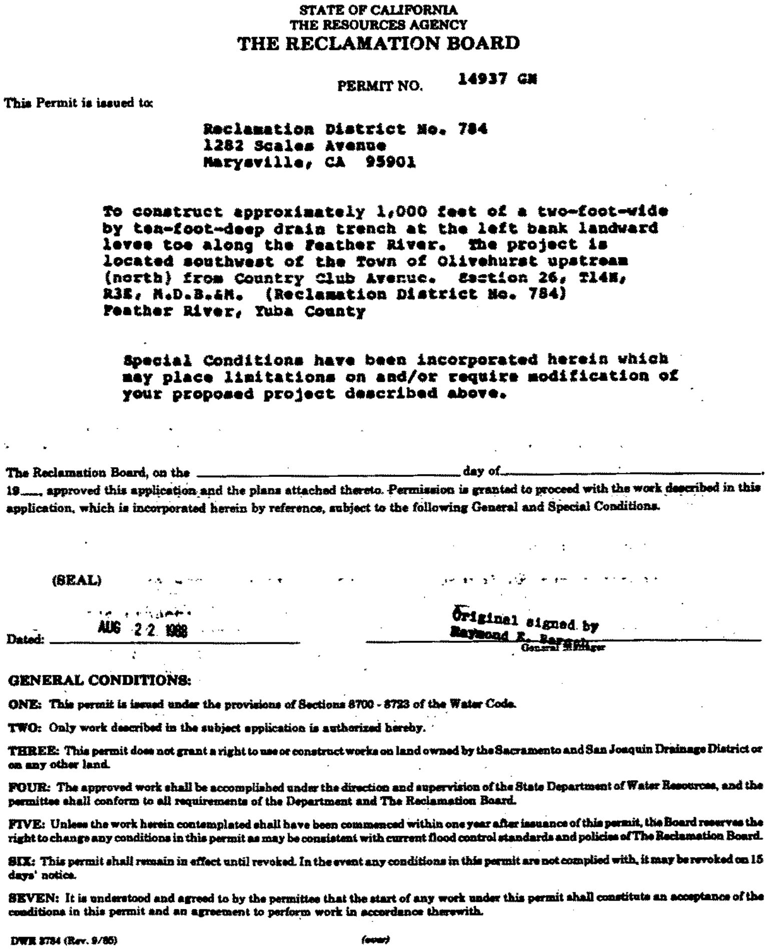
1. State Reclamation Board August 22, 1988 Permit No 14937 GM (Marked Exhibit 1) for the Feather River levee toe drain.

2. Plat (Marked Exhibit 2) from the toe drain Project Manual depicting the location of the toe drain (Seepage Repair Work) near Country Club Road and at the precise location of the Arboga Levee Break.

3. Portion of aerial photograph (Marked Exhibit 3) which was attached to unexecuted Construction Easement for the toe drain, showing Country Club Road and a portion of my orchard, the Feather River levee and toe drain project, and a portion of the Johl prune orchard. I have added identification for the Cook and Johl orchards, the levee, and the approximate location of the center of the levee break.

4. Copy of page 6 (Marked Exhibit 4) of Army Corps November 1992 Study showing "Levels of Flood Protection With and Without Levee Reconstruction."

5. Copy of Sheet 2 of 4 (Marked Exhibit 5) of plans and specifications for the toe drain.



STATE OF CALIFORNIA
THE RESOURCES AGENCY

THE RECLAMATION BOARD

PERMIT NO. 14937 GM

This Permit is issued to:

Reclamation District No. 784
1282 Scales Avenue
Marysville, CA 95901

To construct approximately 1,000 feet of a two-foot-wide by ten-foot-deep drain trench at the left bank landward levee toe along the Feather River. The project is located southwest of the Town of Olivehurst upstream (north) from Country Club Avenue. Section 26, T14N, R3E, M.D.B.&M. (Reclamation District No. 784) Feather River, Yuba County

Special Conditions have been incorporated herein which may place limitations on and/or require modification of your proposed project described above.

The Reclamation Board, on the ______ day of ______, 19___, approved this application and the plans attached thereto. Permission is granted to proceed with the work described in this application, which is incorporated herein by reference, subject to the following General and Special Conditions.

(SEAL)

Dated: AUG 22 1988

Original signed by
Raymond E. Barsch
General Manager

GENERAL CONDITIONS:

ONE: This permit is issued under the provisions of Sections 8700 - 8723 of the Water Code.

TWO: Only work described in the subject application is authorized hereby.

THREE: This permit does not grant a right to use or construct works on land owned by the Sacramento and San Joaquin Drainage District or on any other land.

FOUR: The approved work shall be accomplished under the direction and supervision of the State Department of Water Resources, and the permittee shall conform to all requirements of the Department and The Reclamation Board.

FIVE: Unless the work herein contemplated shall have been commenced within one year after issuance of this permit, the Board reserves the right to change any conditions in this permit as may be consistent with current flood control standards and policies of The Reclamation Board.

SIX: This permit shall remain in effect until revoked. In the event any conditions in this permit are not complied with, it may be revoked on 15 days' notice.

SEVEN: It is understood and agreed to by the permittee that the start of any work under this permit shall constitute an acceptance of the conditions in this permit and an agreement to perform work in accordance therewith.

DWR 3784 (Rev. 9/85)

(over)

EIGHT: This permit does not establish any precedent with respect to any other application received by The Reclamation Board.

NINE: The permittee shall, when required by law, secure the written order or consent from all other public agencies having jurisdiction.

TEN: The permittee is responsible for all personal liability and property damage which may arise out of failure on the permittee's part to perform the obligations under this permit. If any claim of liability is made against the State of California, or any departments thereof, the United States of America, a local district or other maintaining agencies and the officers, agents or employees thereof, the permittee shall defend and shall hold each of them harmless from each claim.

ELEVEN: The permittee shall exercise reasonable care to operate and maintain any work authorized herein to preclude injury to or damage to any works necessary to any plan of flood control adopted by the Board or the Legislature, or interfere with the successful execution, functioning or operation of any plan of flood control adopted by the Board or the Legislature.

TWELVE: Should any of the work not conform to the conditions of this permit, the permittee, upon order of The Reclamation Board, shall in the manner prescribed by the Board be responsible for the cost and expense to remove, alter, relocate, or reconstruct all or any part of the work herein approved.

SPECIAL CONDITIONS:

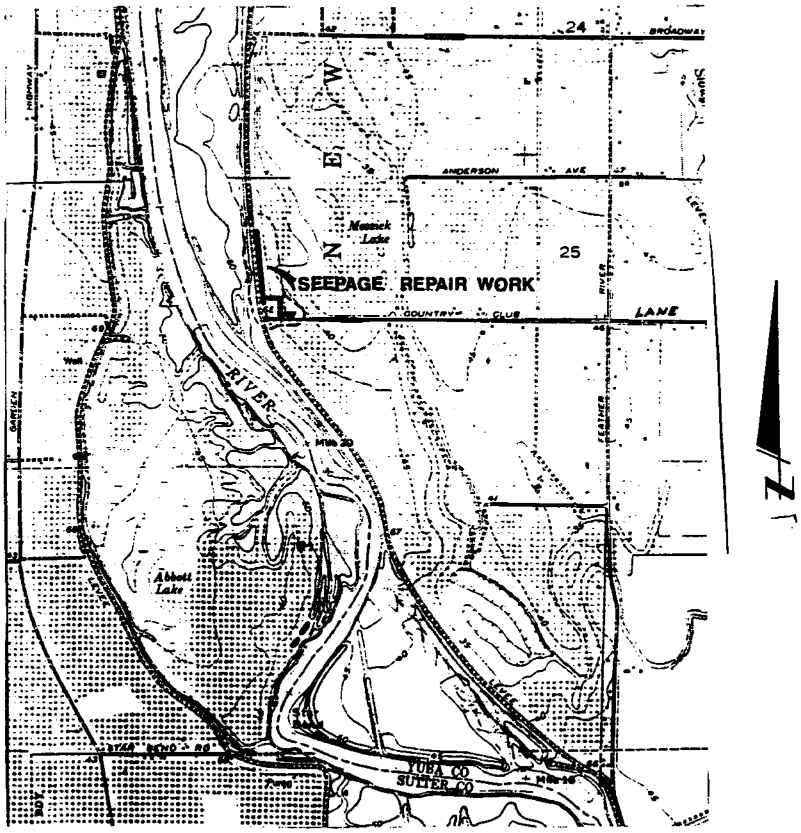
THIRTEEN: An 8-inch slotted PVC collector pipe shall be installed in the bottom of the trench.

FOURTEEN: Seepage water shall be piped to a nearby drainage ditch.

FIFTEEN: The trench filter material shall consist of coarse concrete aggregate.

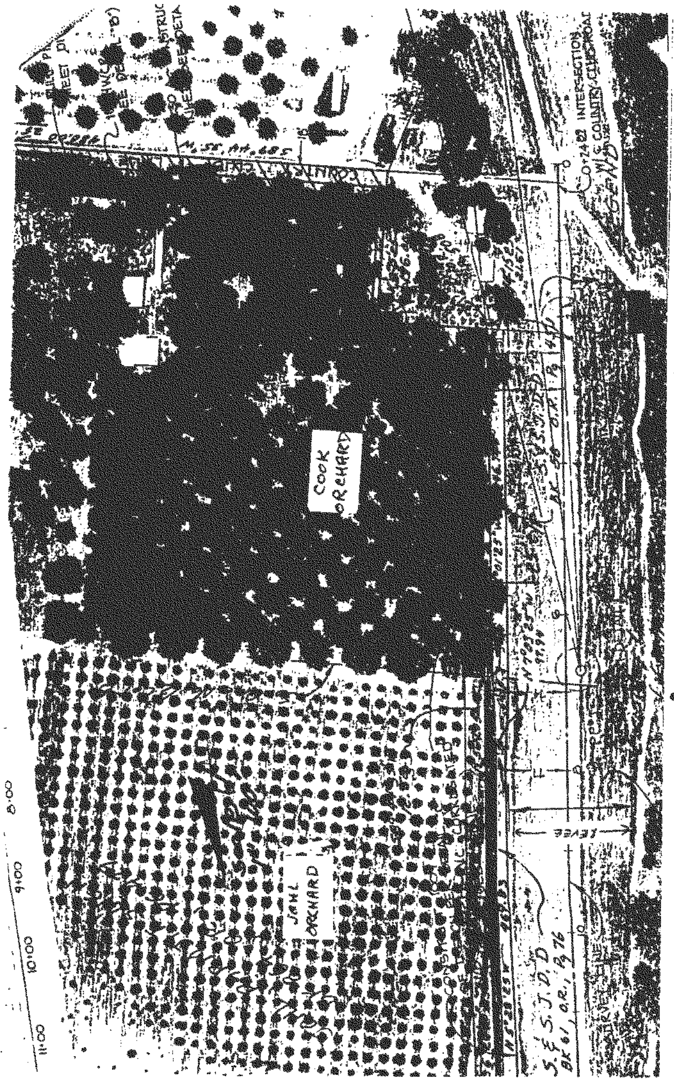
SIXTEEN: The filter fabric shall be installed on both sides and the bottom of the drainage interceptor trench.

SEVENTEEN: The drainage trench cap shall consist of the same concrete aggregate used in the drainage trench.



LOCATION MAP

N.T.S.



APPROX. LOCATION OF LEVEE BREAK

EXHIBIT 3

Table 1

Levels of Flood Protection With and Without Levee Reconstruction [1,2]

	Without Levee Reconstruction		With Levee Reconstruction	
Levee Reach	Peak Flow (cfs)	Recurrence Interval (years)	Peak Flow (cfs)	Recurrence Interval (years)
Feather River				
upstream Honcut Creek	150,000	50	190,000	200+
between Honcut Creek and Jack Slough	155,000 165,000	50	200,000	175+
between Jack Slough and Yuba River		60		150+
between Yuba River and Bear River	268,000	70	292,000	150+
between Bear River and Sutter Bypass	285,000	65		150+
Yuba River				
upstream of mouth	111,000	30	135,000	70
Bear River				
upstream of mouth		65		100+
Sutter Bypass				
between Tisdale Bypass and Feather River	178,000	20		150+

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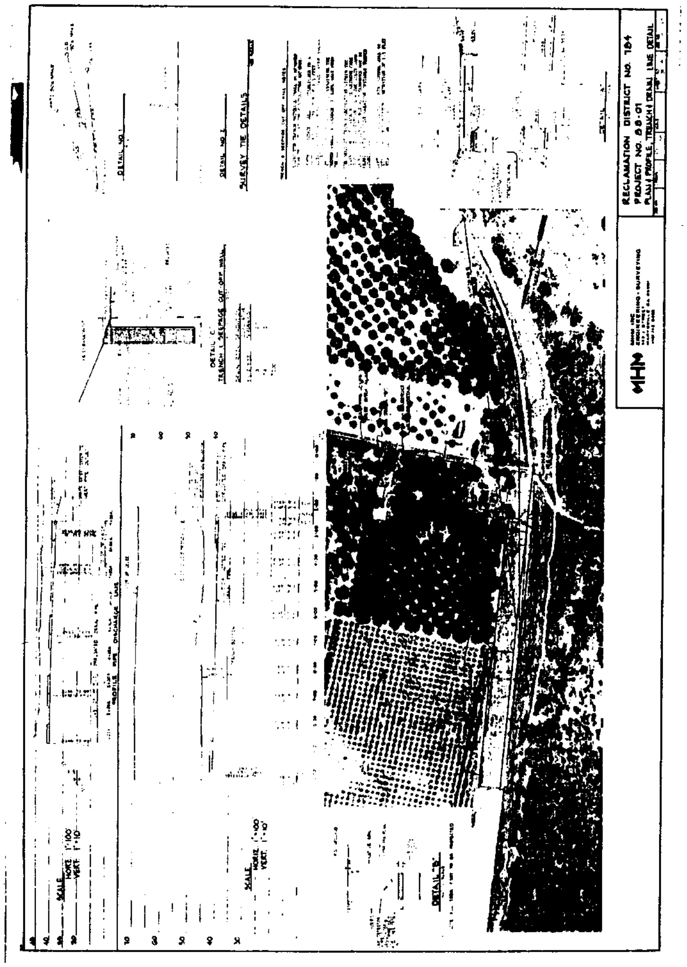
[1] Recurrence intervals are based on the assumption that no levee breaches occur upstream. In reality, if a levee break occurred upstream, downstream levee reaches would have a higher level of flood protection than those shown above.

[2] Levels of flood protection with levee reconstruction are based on a minimum of 3 feet of freeboard in a specified levee reach.

From 1990 IAR, Corps of Engineers


RECLAMATION DISTRICT NO. 784
PROJECT NO. 88-01
PLAN / PROFILE, TRENCH DRAIN LINE DETAIL
MHM
DETAIL C
TRENCH & SEEPAGE CUT OFF WALL
SURVEY TIE DETAILS
DETAIL NO. 1
DETAIL NO. 2
SCALE HORIZ. 1"=100' VERT. 1"=10'
SCALE HORIZ. 1"=100' VERT. 1"=10'

Written Testimony—4/16/97
re: HB 476
From:
Tom Baker, Mayor, Waitsburg, Washington

Our community is located near the confluence of the Touchet River and Coppei Creek in southeastern Washington State.

Our community with a population of 1125 had five flood events within a 12-month period.

Initial flooding began on February 7, 1996, threatening dikes along the Touchet River, washing out a 50-foot section of dike in the center of town. The high water was the result of a weather pattern common to this area when the temperature went from minus 14º to 57º overnight, accompanied by several inches of warm rain.

That dike was repaired under emergency measures on February 8.

We had a catastrophic flood event on Friday, February 9, which flooded some 80 residences and businesses, and deposited 36,000 cubic yards of mud in our downtown area.

We experienced a third flood event on April 23 of that year.

We had information that the snowpack in the Touchet watershed was a magnitude of 200% of what it was in the fall of 1995. We had another flood event on January 1, 1997, and a fifth flooding threat in the first week of February, 1997.

In each of the threats we were in contact with the Corps of Engineers through two employees who live in Waitsburg. They were great help to us in assessing the critical areas and obtaining flood fight help.

One of the standards used by the Corps of Engineers is that they can assist us when the threat is imminent, but when the waters recede, they withdraw their help.

A common theme of the communities along the Touchet River is that since we live here, we have a better understanding of the nature of an imminent threat than someone who is assessing the situation from a distance.

County Commissioner Jon McFarland of Columbia County has suggested that the authority of judging whether an emergency situation exists be held by local officials instead of by the staff of the Corps of Engineers or by some emergency agency head located in Olympia, 300 miles to the west of us. After our first flood on February 7, the river subsided momentarily. But we were extremely vulnerable because of dike damage that had been done. Outside evaluation would indicate that the flood danger was past. Common sense dictates that with a weakened dike system, we were more vulnerable that before to even moderate flooding. This is why it would seem that the declaration of emergency should be, at least in part, held by the local jurisdiction.

When fighting a flood we found that many times a weak dike or a potential spot of breakout could be identified during the "flood fight" stage, but could not be reached because of the amount of moisture in fields and dikes.

We suggest that certain areas identified as potentially dangerous in the future be included under the "flood fight" umbrella in order to avoid future damage.

In principle it seems more prudent to avert a future flood than to allow it to happen then spend FEMA dollars to help people recover from damage done by unrepaired rivers.

A small community does not have the financial resources to handle flood fighting or damage reimbursement. Our yearly budget is slightly over $1 million, and our total flood costs were close to $2 million in 1996.

As we worked with our county officials as well as with Rep. Nethercutt's staff, we began the search for funding to assist us through this emergency.

FEMA had promised that some upfront money would be available immediately, with the paperwork to follow. That never happened for us. We had a FEMA team working here for several months, helping us to write DSRs and assessing damages. Many times we were told by the FEMA representatives, "I'm not supposed to tell you this, but you might apply to Agency A to get some help with a project."

In conversations with Rep. Nethercutt, I suggested that the federal government needs to consider a facilitator to work in the aftermath of such incidents as we had, a person with a broad knowledge of procedures and funding available, with staff and ability to walk us through the procedures.

Instead, we found that some of the agencies were quite protective of both their turf and their emergency funds, and that we had to learn by our own experience how to work through this maze.

Many of our citizens, frustrated by what the city or they as individuals could not do, expressed the thought that our government seems to be more concerned with the welfare of the fish in the stream as opposed to the safety of the people.

Each flood fight venture we undertook, after the immediate emergency was declared to be past, was complicated by the variety of permits that had to be obtained to do what evidently had to be done to protect our town from further damage.

Two flood incidents in three days with severe damage to property causes residents of a small town such as ours to be very pro-active regarding dike damage and further flood control. We spent most of last year going through the various permitting processes to allow us to do needed repair work. People who still feel threatened by potential flooding are very short of patience with a myriad of governmental regulations which seem to serve the agencies involved but not necessarily the safety of the citizens.

Flood fighting and flood prevention is expensive, and for a small town with limited resources, it becomes a funding game. In addition to relief from a variety of restrictive regulations that specify what can't be done, we would welcome some help from an "umbrella" function which could walk us through the application paperwork and consolidate the permitting process into a uniform set of documents which could be used by all those exercising authority over the waterways.

We appreciate the intent of HB 478, and hope that further work can be done to assure that funds used for flood fighting and rehabilitation be used for those purposes and not merely to support inter-agency competition.

Thank you for considering my testimony. Tom Baker

Mail to:
Ms. Elizabeth
House Committee on Resources
1324 Longworth HOB
Washington, D.C. 20215

Mr. Jon W. McFarland
RR 3 Box 248
Dayton, Washington 99328

23 April 1997

TO: House Committee on Resources

From: Jon W. McFarland
County Commissioner (Retired)
Columbia County, State of Washington

Subj: Testimony for Reform of the Endangered Species Act (ESA) with regard to Flood Prevention and Relief

The massive floods of February 1996 followed by the additional storms of last spring and this past December have produced the most significant battle against natural disaster in Columbia County's history. The staggering amount of damage to public facilities and private property throughout the County and its two small communities was over 32 millions dollars. Two dozen major bridges in the County and several within community boundaries as well as numerous minor bridges received crippling damage. Hundreds of miles of county roadways, city streets, sewage systems, rural wells, and septic systems were rendered useless. Hundreds of families were cut off from life saving relief.

In addition to the major losses of public facilities, services, and private property was the frustration of attempting to deal with enforcement regulations and some of the agencies that administer these regulations. Cooperative programs were hammered out in the majority of instances but not without constant conflict over basic authority and priorities for protection of life and property verses the protection of fish and fish habitat.

County (or City) government is by law the primary response and prevention agency responsible for life, livelihood, and the protection of public and private property and facilities in the event of a natural disaster. However, shoreline management codes meant to be applied under "business as usual" circumstances were applied with little consideration of people needs during the emergencies. Current state and federal codes/regulations when applied in emergencies greatly increase the potential for loss of life and property and were a direct challenge to the responsibilities of county and city officials. There is ample evidence to suggest that endangering fish or disturbing fish habitat is a satisfactory reason for denying permits or not expeditiously approving emergency work orders regardless of the severity of damage or threat to life and property. The codes/regulations are also being used by state and federal agencies to dictate to the counties and cities when an emergency is over regardless of obvious imminent danger. The promise to streamline requirements or speed up approval procedures, including verbal approval, did not materialize until after much time consuming confrontation. The definition of an emergency (state and federal agencies recognize immediate situation only) created tremendous potential for the endangerment of life, facilities, and property. Preventive maintenance against disaster cannot be developed under the current interpretation of regulations. Countywide (including cities/communities) comprehensive flood control plans including preventive maintenance programs and emergency procedures would save millions in damage repair and greatly reduce threat to life and property.

Recognizing the need for immediate regulatory reform, the State of Washington recently approved a bill containing a directive expanding the definition of emergencies to include imminent as well as immediate situations and authorizing the development of a county five year preventive maintenance plan. However, the year long efforts resulting in the successful passage of the State legislation will be wasted unless the ESA of 1973 is amended also. Columbia County strongly supports the approval of HR 478 containing amendments to the ESA of 1973. Natural disasters require the ultimate in team work before, during, and after the event. The passage of HR 478 would provide a key element in insuring team members the ability to perform in a responsive manner and to develop comprehensive planning designed to protect both environmental and local interests.

DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
CIVIL WORKS
108 ARMY PENTAGON
WASHINGTON DC 20310-0108

REPLY TO
ATTENTION OF

19 MAY 1997

Honorable Don Young
Chairman
Committee on Resources
House of Representatives
Washington, D. C. 20515

Dear Mr. Chairman:

At the April 10, 1997, Committee on Resources oversight hearing on implementation of the Endangered Species Act, I offered to provide information on the Army Corps of Engineers activities since 1986 to reconstruct the levees in the Marysville-Yuba City, California, area for the hearing record. A levee did break in this area near Arboga, California, in January 1997.

Enclosed is a chronology of major actions and decision points leading to the ongoing levee reconstruction project in the Marysville-Yuba City area. Federal and state environmental protection provisions were considered and complied with in conjunction with Corps and local sponsor's approvals and funding decisions. Endangered Species Act procedures and provisions did not cause delays in schedules for this levee reconstruction work.

Thank you for the opportunity to appear before the committee to provide information on this subject.

Sincerely,

Michael L. Davis
Deputy Assistant Secretary of the Army
(Civil Works)

Enclosure

CESPK-PM-C
5 May 1997

Sacramento River Flood Control System Evaluation
Second Phase, Marysville/Yuba City Area
Summary of Major Actions

Date	Action	Comments
February 1986	Flood of 1986 caused numerous levee problems on Sacramento River Flood Control Project levees.	Five Phase evaluation of existing levee system proposed.
May 1988	Second Phase (Marysville/ Yuba City area) of levee evaluation initiated.	First Phase initiated in January 1987.
September 1991	Initial Appraisal Report on levee conditions and need for reconstruction approved.	2-1/2 years to evaluate levees and approve general plan for reconstructing levees.
October 1992	New Construction Start funds appropriated for levee reconstruction in Marysville/Yuba City area.	
April 1993	National Environmental Policy Act document prepared.	75.8 acres mitigation area needed to offset adverse impacts primarily to threatened species under the Endangered Species Act.
May 1994	Design Memorandum, plan and cost for levee reconstruction work in Marysville/Yuba City area approved.	2-1/2 years to explore, design, revise, and update plan for 32 miles of levee reconstruction work.

Sacramento River Flood Control System Evaluation
Second Phase, Marysville/Yuba City Area
Summary of Major Actions

Date	Action	Comments
July 1994	Project Cooperation Agreement executed between Corps of Engineers and California Reclamation Board.	Local supporting agreement between Reclamation Board and local entities signed in June 1994.
July 1995	First construction contract awarded on levees north of Marysville.	Lands acquired for levee reconstruction work in June 1995. Work completed in September 1996.
August 1995	Mitigation area contract initiated.	Lands acquired for mitigation area in February 1995.
December 1995	"Betterments" to be included with levee reconstruction work in RD 784 (Linda/Olivehurst/ Arboga). Work to be accomplished in two separate construction contracts.	Slurry wall design with "betterments" initiated while remaining design rescheduled pending findings of Yuba River Basin Feasibility Study on the likely National Economic Development plan for future flood control improvements.
February 1996	Likely National Economic Development plan evaluated; Contract 2 "betterments" to be included.	Plans revised and first construction contract with "betterments" scheduled for award in September 1996.

Sacramento River Flood Control System Evaluation
Second Phase, Marysville/Yuba City Area
Summary of Major Actions

Date	Action	Comments
September 1996	Contractor bids opened for first construction contract in Reclamation District 784.	Bidder protested.
January 1997	Levee break at Arboga.	
January 1997	First construction contract awarded in Reclamation District 784.	4 months to resolve bidder's protest.
June 1997 (current schedule)	Plans for second contract with "betterments" scheduled for completion.	4 additional months to modify plans for post-flood conditions.

Charles F. Gauvin
President
Chief Executive Officer

April 15, 1997

The Honorable George Miller
United States House of Representatives
Washington, DC 20510

Re: Opposition of Trout Unlimited (TU) to HR 478, "The Flood Prevention and Family Protection Act of 1997."

Dear Representative Miller:

I am writing to express our strong opposition to the above-referenced bill and to urge you to oppose it vigorously as well. While we have strong sympathy for the bill's stated purpose –to improve the ability of people, municipalities and agencies to cope with floods- it would in reality make flooding worse in addition to undercutting critical trout and salmon, and overall watershed, restoration efforts nationwide.

HR 478 is unnecessary. The legislation would exempt federal and non-federal flood control projects from the consultation (Section 7(a)) and take (Section 9(a)) requirements of the Endangered Species Act (ESA) for any agency action that consists of construction, operation, maintenance and repair of flood control facilities for emergency actions as well as routine maintenance. The U.S. Fish and Wildlife Service and the National Marine Fisheries Service already have ample authority to deal with remediation of floods and structure repair in a timely, flexible manner. There is no credible evidence from the recent California and Pacific Northwest floods that implementation of the ESA has worsened flood damage or increased human suffering.

Enactment of HR 478 would undercut trout and salmon protection and recovery efforts nationwide. There are literally thousands of dams and other structures nationwide that have flood control as a purpose. Construction and operation of these dams are one of the primary reasons why the nation now has twelve species of trout and salmon on the endangered species list, including the once ubiquitous and valuable runs of Snake River chinook and central California coho salmon. Many other species of trout and salmon (Atlantic salmon, steelhead, and bull trout to name but a few) are candidates for listing. HR 478 would give dam-managing agencies, such as FERC, the Bureau of Reclamation and the Army Corps of Engineers, *carte blanche* to conduct or authorize construction, maintenance, repair and operation of dams and other structures in the name of flood control regardless of the impacts of those actions on listed species. This is a prescription for

America's Leading Coldwater Fisheries Conservation Organization
Washington, D.C. Headquarters: 1500 Wilson Blvd., Suite 310, Arlington, VA 22209-2404
Main Number: 703-522-0200 FAX: 703-284-9400

species extinction and further erosion of once-thriving sport and commercial salmon fisheries on both coasts of the nation.

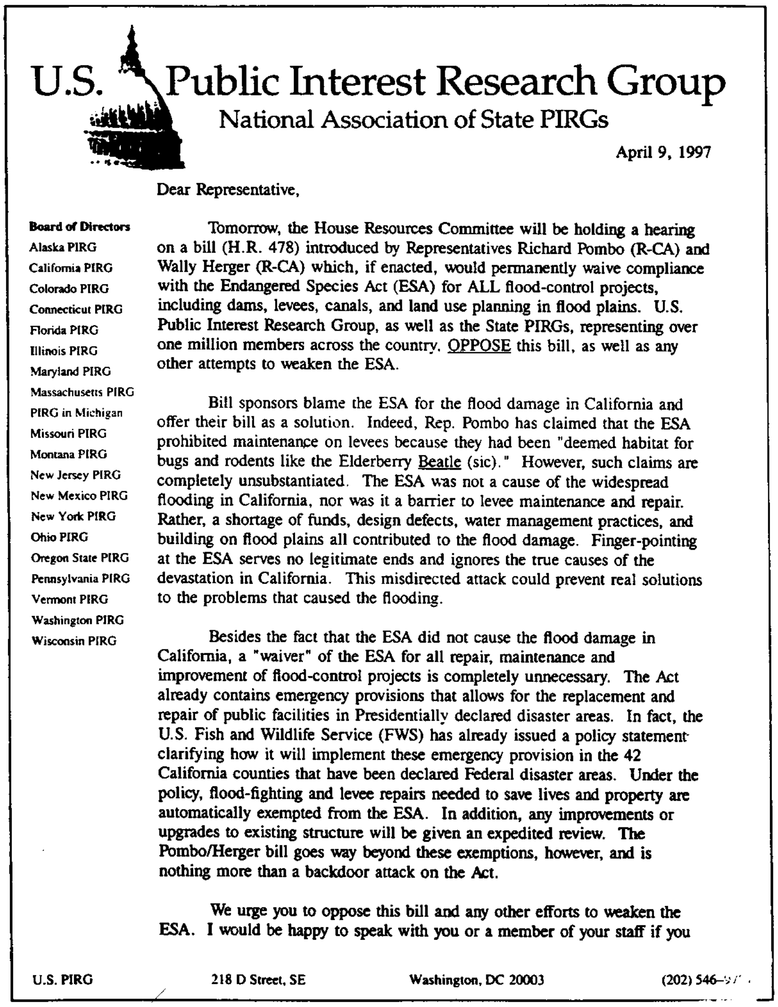
Finally, HR 478 would likely worsen the effects of floods. The science of managing floods to protect human health as well as natural resources is telling us to move away from increasing our use of structures and toward restoring healthy floodplains and wetlands. The bill would only exacerbate the problem of having too any flood control structures, and not enough natural flood control systems. I urge you to pursue efforts to increase the nation's inventory of healthy floodplains and wetlands, rather than passing bills such as HR 478.

Again, I urge you to oppose this bill.

Sincerely yours,

Charles F. Gauvin

cc: Members of the Resources Committee



U.S. Public Interest Research Group
National Association of State PIRGs

April 9, 1997

Board of Directors
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Dear Representative,

Tomorrow, the House Resources Committee will be holding a hearing on a bill (H.R. 478) introduced by Representatives Richard Pombo (R-CA) and Wally Herger (R-CA) which, if enacted, would permanently waive compliance with the Endangered Species Act (ESA) for ALL flood-control projects, including dams, levees, canals, and land use planning in flood plains. U.S. Public Interest Research Group, as well as the State PIRGs, representing over one million members across the country. OPPOSE this bill, as well as any other attempts to weaken the ESA.

Bill sponsors blame the ESA for the flood damage in California and offer their bill as a solution. Indeed, Rep. Pombo has claimed that the ESA prohibited maintenance on levees because they had been "deemed habitat for bugs and rodents like the Elderberry Beatle (sic)." However, such claims are completely unsubstantiated. The ESA was not a cause of the widespread flooding in California, nor was it a barrier to levee maintenance and repair. Rather, a shortage of funds, design defects, water management practices, and building on flood plains all contributed to the flood damage. Finger-pointing at the ESA serves no legitimate ends and ignores the true causes of the devastation in California. This misdirected attack could prevent real solutions to the problems that caused the flooding.

Besides the fact that the ESA did not cause the flood damage in California, a "waiver" of the ESA for all repair, maintenance and improvement of flood-control projects is completely unnecessary. The Act already contains emergency provisions that allows for the replacement and repair of public facilities in Presidentially declared disaster areas. In fact, the U.S. Fish and Wildlife Service (FWS) has already issued a policy statement clarifying how it will implement these emergency provision in the 42 California counties that have been declared Federal disaster areas. Under the policy, flood-fighting and levee repairs needed to save lives and property are automatically exempted from the ESA. In addition, any improvements or upgrades to existing structure will be given an expedited review. The Pombo/Herger bill goes way beyond these exemptions, however, and is nothing more than a backdoor attack on the Act.

We urge you to oppose this bill and any other efforts to weaken the ESA. I would be happy to speak with you or a member of your staff if you

U.S. PIRG 218 D Street, SE Washington, DC 20003 (202) 546–

PRINTED ON 100%

have any questions.

Sincerely,

Kimberley Walley Delfino

Kimberley Walley Delfino
Staff Attorney

Alabama Rivers Alliance • American Canoe Association • American Rivers • Appalachian Mountain Club • Atlantic Salmon Federation • California Sport Fishing Protection Alliance • California Trout • Colorado Rivers Alliance • Federation of Fly Fishers • Friends of the River • Idaho Rivers United • Michigan Hydro Relicensing Coalition • Montana River Action Network • Natural Heritage Institute • New England F.L.O.W. • New York Rivers United • River Alliance of Wisconsin • River Council of Wahsington • Sawmill River Watershed Alliance • Trout Unlimited • Tuolomne River Preservation Trust

March 17, 1997

Representative George Miller
Ranking Member, House Resources Committee
U.S. House of Representatives
B-1324 Longworth House Office Building
Washington, DC 20515

Re: H.R. 478, Flood Prevention and Family Protection Act of 1997
a bill to amend the Endangered Species Act of 1973 (16 U.S.C. 1536(a))

As members of the Hydropower Reform Coalition, we are very concerned that proposed language in Congressman Wally Herger's bill, H.R. 478, to amend the Endangered Species Act of 1973 is unnecessarily broad and would effectively render the ESA meaningless in the licensing of hydrodam facilities and in the enforcement of compliance with those licenses.

This bill will further imperil endangered and threatened species by exempting Federal and non-Federal flood control projects, facilities, and structures from consultation and conferencing under Section 7(a) of the ESA and from taking of a species under Section 9(a), all under the guise of protecting the public. The proposed amendments allow the possibility for broad interpretation of a "flood control project" to include hydropower dams and other related facilities, reopening numerous agreements and licenses to endless litigation.

We understand that the Resources Committee may be holding a mark-up on this bill. We urge you to raise these concerns with Mr. Herger, Mr. Pombo, and the members of your committee.

The undersigned conservation and recreation groups represent over 750,000 individuals nationwide. Most of us work to protect endangered river species from the damaging effects of dams and other obstructions. Aquatic species are disappearing at an alarming rate: 68% of freshwater mussels and 39% of fishes are either extinct, imperiled or vulnerable. This is compared to 14% of birds and 16% of mammals.[1]

While many of our groups share concerns about the recent flooding in California and other states, we feel strongly that this bill will do nothing to remedy the present situation or any future problems. This bill is nothing but a veiled attempt to roll back important environmental legislation for the benefit of a few industries. Section 7(p) of the ESA already provides ample flexibility in natural disaster situations and was enacted in several instances during this spring's floods in California. It is wrong to blame the elderberry beetle or other endangered species for the flooding in California and amending the Act will do nothing to further prevent such disasters.

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[1] Stein, Bruce and Stephanie R. Flack, 1997 Species Report Card: The State of U.S. Plants and Animals, The Nature Conservancy, Arlington, VA

By exempting agencies from responsibility for consultation and conferencing, this bill gives Federal Energy Regulatory Commission, the Army Corps, the Bureau of Reclamation, and other agencies that regulate hydropower facilities, the ability to circumvent the U.S. Fish and Wildlife Service and National Marine Fisheries Service. Those later mentioned agencies have the expertise and legal mandate to protect fish and wildlife, for which FERC and others have little obligation or incentive to act.

The permitting of takings under H.R. 478 gives dam owners and federal agencies carte blanche to do whatever they will, without consideration for the laws with which all citizens must abide. Such favoritism is not justified by a perceived crisis of either potential or real flooding events.

Economically significant species such as salmon continue to decline as a result of dam construction and operation. By backsliding on the ESA as in H.R. 478, we will further lose these and other imperiled aquatic species. Please recognize these concerns, not as a callous disregard for human suffering in what is clearly a difficult time for thousands of citizens affected by floods, but as a call for a more targeted and directed solution that does not scapegoat endangered species and sacrifice our natural heritage.

Sincerely yours,

Alabama Rivers Alliance
American Canoe Association
American Rivers
Appalachian Mountain Club
Atlantic Salmon Federation
California Sport Fishing Protection Alliance
California Trout
Colorado Rivers Alliance
Federation of Fly Fishers
Friends of the River
Idaho Rivers United
Michigan Hydro Relicensing Coalition
Montana River Action Network
Natural Heritage Institute
New England F.L.O.W.
New York Rivers United
River Alliance of Wisconsin
River Council of Wahsington
Sawmill River Watershed Alliance
Trout Unlimited
Tuolomne River Preservation Trust

C4 *THE NEW YORK TIMES* **THE ENVIRONMENT** *TU*

California Floods Change Thinking on Need to Tame Rivers

New approach tries to restore waterways' natural functions.

By JON CHRISTENSEN

SACRAMENTO, Calif.

NOW that the raging floodwaters that made California's Central Valley an inland sea last month have largely receded, a debate about the lessons of the floods is under way among scientists, environmentalists, planners and politicians.

The New Year's floods began when a three-day storm dumped warm rains from Hawaii on a snowpack that was already nearly double the average in the Sierra Nevada. Runoff quickly filled reservoirs and overwhelmed levees. Floodwaters covered 250 square miles and destroyed or damaged at least 16,000 homes, killed eight people, and caused an estimated $1.6 billion in damage in California.

The devastation has prompted some state and local officials to try to revive a moribund proposal to build the Auburn Dam on the American River above Sacramento. But most officials acknowledge that there is scant chance of getting Federal or state funds for big new dams.

Instead there is a wide consensus that rivers need more room "to do their own thing," in the words of Dave Gore, a planner with the Army Corps of Engineers in Sacramento. The Federal Government, states and counties are moving away from "big structural flood control measures" that cost a lot to build and maintain, he said.

"Rivers are going to flood and meander and shift their alignments as floods come and go," he said. "If you use some sense and put a corridor of 100 feet on each side of the river and don't allow development there, in the long run you're saving yourself a lot of money, headache and heartache, and you have a nice river corridor."

Environmentalists applaud this change in thinking. "We're going to have to live with floods," said Charles Casey of Friends of the River in California, which has fought the proposed Auburn Dam for many years. But it is no longer just environmentalists who are saying such things.

"We're starting to look at the big picture instead of just putting things back the way they were," said Linda Adams, a staff member of the State Senate Committee on Agriculture and Water Resources, which has been holding hearings on the floods. "We've channeled the rivers into small spaces and they don't like it."

Walter Yep, chief of planning for the Army Corps of Engineers in California, Nevada, Utah and Colorado, said many people were calling for more dams. "This generally happens when you have the misery of flooding," he said. "But the values of 50 years ago — when we built dams upstream and we straightened our rivers and put them in concrete channels — need to be re-examined."

The Mississippi floods of 1993 brought this change in thinking to the forefront, said Mr. Yep. But it has been in the works for some time here. And this year's floods provide an opportunity to put the new concepts to work. The Corps' flood control projects "never provided for natural flood plains," Mr. Yep said. Now the agency is trying to restore some of the natural functions of rivers, in some places by taking down its levees and opening its concrete channels. "When we talk about construction now it's not necessarily concrete," he said. "It's restoring rivers, putting a meander in, landscaping and revegetation."

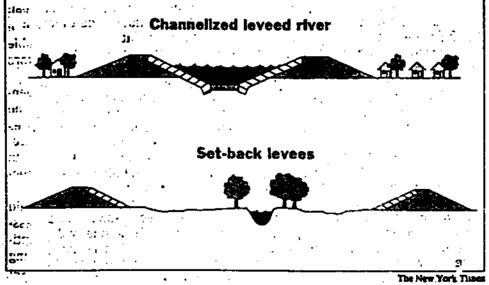
Dr. Jeffrey F. Mount, author of "California Rivers and Streams: The Conflict Between Fluvial Process and Land Use" (University of California Press, 1995), said: "The Corps of Engineers and the Bureau of Reclamation are undergoing gut-wrenching philosophical changes. The old tradition of when in doubt, pour concrete, is simply not going to work anymore for financial and environmental reasons."

Dr. Mount's book examines how California's landscape has been transformed in the last century by damming and channeling rivers and building in flood plains. "The same mistakes that were made on the Mississippi were made here and continue to be made," Dr. Mount said. "We're rapidly urbanizing and all that growth is taking place in the flood plain. Californians have become addicted to levees. There are over 5,000 miles of levees in California. And each additional levee constructed along a river spreads the impact to another region, which in turn begins to plead for more protection. The crisis will be visited again and again if we don't learn some lessons from what happened."

NY Times
2/4/97

New Approach to Managing a River

High levees next to a river's central channel (top) may control a flood, but at great expense. Less expensive set-back levees (bottom) let the river occupy its natural flood plain. The resulting wetlands act as a buffer for floods; between floods, they can be used for farming.



The New York Times

Flood plains are by definition regularly occupied by floodwaters, he said, and free-running rivers top their banks on average once every two years. "I think we should turn flood control on its head," Dr. Mount said. "We should seek flood promotion. Flooding in one place spares another. I like to think of it as a system of circuit breakers. If floods occur primarily on agricultural areas the damage to population centers is reduced."

Dr. Mount said planners have begun to move away from pouring concrete, building reservoirs and channeling rivers, to restoring streams and rivers and constructing wetlands to slow down, retain and spread out flood waters. Levees are being set back from river channels to give rivers room to meander and develop riffles, pools and riparian vegetation, and to store water on their flood plains, reducing upstream and downstream flooding. Farmers are being paid to allow their fields to be flooded during high water.

"But the cheapest and best approach is good land use planning," Dr. Mount said. Developments are still being planned and built in flood plains around the West, but new developments often include open spaces that are meant to flood.

The Yolo Bypass is an example of an engineered solution designed "to mimic the natural process of a flood plain within a river system," said Dr. Mount, "allowing a river access to its flood plain." A 30-mile-long stretch of farmland is protected by levees and farmed in the summer. In the winter, the levees are opened and the bypass carries flood waters from the Sacramento River to the San Francisco Bay Delta.

The Corps of Engineers is now looking at other areas on the Sacramento River near Yuba City, Marysville and Sacramento where the "river has potential to meander naturally or we can provide a bypass area that can serve as habitat or farmland," Mr. Yep said. "This is a good opportunity to look at where we can widen the river course. It'll be difficult in urban areas but outside of those areas we have tremendous opportunities to widen the river and provide more room for the river to flow."

State agencies and the Federal Emergency Management Administration are also looking at ways to spend disaster relief money to help reduce future flood damages. Since the Midwest floods of 1993, 15 percent of the flood relief money distributed by the agency has gone to states for mitigation projects. In the Midwest the program was used to buy out or relocate about 10,000 homes and businesses and move buildings from more than 100,000 acres of flood plain.

Major efforts to reform Federal irrigation projects in the Central Valley and the San Francisco Bay Delta are also providing millions of dollars for restoration projects that will help with flood management in the future. "In the past we would hear it would be great to do these things but we don't have the wherewithal and resources," said David Yardas of the Environmental Defense Fund. "We think there's a real win-win-win to move the levees back and take pressure off the levees, let the river find its meander and restore habitat, and provide some water supply benefits."

The Environmental Defense Fund is urging that a commission study the California floods much like the interagency panel that studied flood plain management after the Mississippi floods. But Brig. Gen. Gerald Galloway, retired, of the Army Corps of Engineers, who led the Mississippi flood plain study, said he did not think a commission would add much to the debate in California.

"The principles of flood plain management are now well known," he said. "There's no silver bullet. What you need is people willing to come to grips with the problem honestly. And now is the time to come to grips with it, because the half-life of memories of floods is very short."

For some, the lessons of this flood have already sunk in. After watching the Sacramento River flood his 600 acres of almond and prune orchards, Barney Flynn has decided to stop fighting the river. Mr. Flynn spent $70,000 to fix 1,200 feet of levee on the outside edge of a river bend after floods last year. He now plans to sell 50 acres of riverfront property to the United States Fish and Wildlife Service and move his levees back 600 feet.

"We're getting out of the levee business," he said. "We sat back and looked at the cost of maintaining that levee and decided that if the river wants to change course it might be more productive for us to back off."

Board of Supervisors

Riverside County Flood Control
and Water Conservation District

RESOLUTION NO. F97-5
SUPPORTING H.R. 478
"FLOOD PREVENTION AND FAMILY PROTECTION ACT OF 1997"

WHEREAS, on January 21, 1997 Congressman Herger and Congressman Pombo of the United States House of Representatives introduced a bill entitled H.R. 478, otherwise known as the "Flood Prevention and Family Protection Act of 1997", an amendment to the Endangered Species Act of 1973; and

WHEREAS, the purpose of this Bill is to improve the ability of individuals and local, state, and federal agencies to comply with the Endangered Species Act of 1973 in building, operating, maintaining, or repairing flood control projects, facilities, or structures to address imminent threats to public health or safety or catastrophic natural events or to comply with local, state, and federal public health or safety requirements; and

WHEREAS, during the District's fifty year history, it has developed an extensive flood control system in western Riverside County including 35 dams, debris and detention basins, 48 miles of levees, 188 miles of open channel and 182 miles of underground storm drain; and

WHEREAS, proper operation and maintenance of this flood control system is critical to protect the life and property of the residents of western Riverside County, and is essential to ensure that economic activity and transportation corridors are not disrupted during times of flooding; and

WHEREAS, several of these projects have been constructed in partnership with such Federal agencies such as the U.S. Army Corps of Engineers, the Natural Resources Conservation Service and the U.S. Forest Service; and

WHEREAS, in the case of projects constructed with Federal partners, the District is mandated to operate and maintain those projects to standards dictated by the Federal agencies, as well as indemnifying and holding them harmless from all liability and damages; and

WHEREAS, there are additional Federal mandates for flood control maintenance through the County's participation in the National Flood Insurance Program, wherein the Federal Emergency Management Agency (FEMA) requires the "Community", in this case Riverside County and its incorporated Cities, to maintain the carrying capacity of all flood control facilities, and in some cases even semi-natural creeks and rivers; and

WHEREAS, as owner of most of the regional facilities, this maintenance responsibility ultimately falls on the District, which, if it fails to meet its maintenance responsibility, subjects the "Community" to expulsion from the National Flood Insurance Program, loss of other Federal aid, and even exposure to suits by FEMA for recovery of flood insurance and disaster payments; and

The foregoing is certified to be a true copy of a resolution duly adopted by said Board of Supervisors on the date therein set forth.
GERALD A. MALONEY Clerk of said Board
By Deputy

WHEREAS, examples of adverse impacts to the public's health and safety brought about by federal regulation and the federal Endangered Species Act of 1973 include:

- The January 1993 flooding of Old Town Temecula by Murrieta Creek which resulted in over ten million dollars of property damage. Federal officials refused to allow mechanical clearing and removal of accumulated sediment in the creek, partially due to alleged concerns about the endangered least Bell's vireo, and only after the flood damage occurred, were they willing to allow critically needed flood control maintenance to take place.
- For a significant period, the District had been advised that it could not control burrowing rodents in major earth fill flood control dams (Alessandro and Pigeon Pass Dams) for fear of accidentally "taking" the endangered Stephens' kangaroo rat. Failure to control burrowing rodents in these earth fill dams could have lead to a catastrophic failure impacting large areas of the cities of Riverside and Moreno Valley.
- The District was prevented for more than two years from making critical repairs to the Santa Ana River levees, a Federal flood control project protecting the City of Riverside, because two endangered woolly-star plants were discovered in the general area of the repair work; and

WHEREAS, survival of a species was not at stake in any of these cases, but inflexibility built into the Endangered Species Act, along with inflexibility of the regulatory staff, created an environment where reason and the public interest were of little consequence; and

WHEREAS, the District's mission of constructing projects, facilities and structures to address imminent threats to public health or safety or catastrophic natural events or to comply with local, state, or federal public health or safety requirements has often been and, without amendments, will continue to be impaired by the federal Endangered Species Act of 1973; now, therefore,

BE IT RESOLVED by the Board of Supervisors of the Riverside County Flood Control and Water Conservation District in regular session assembled on April 8, 1997, that they support H.R. 478, the Flood Prevention and Family Protection Act of 1997.

BE IT FURTHER RESOLVED that the General Manager-Chief Engineer, or his designee, is authorized and directed to distribute certified copies of this resolution to Members of the House of Representatives Committee on Resources and to provide testimony before that Committee as to the Board's support of this Bill.

DW:seb
rcfc\13884

ROLL CALL:
Ayes: Buster, Tavaglione, Venable and Mullen
Noes: None
Absent: Wilson

IMPACTS OF THE ENDANGERED SPECIES ACT ON FLOOD CONTROL ACTIVITIES

STATEMENT OF FRANK J. PEAIRS
TO THE
U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON RESOURCES
HONORABLE DAN YOUNG, CHAIRMAN
APRIL 10, 1997

Mr. Chairman, members of the Committee, my name is Frank Peairs, and I'm the Assistant Chief Engineer of the Riverside County Flood Control and Water Conservation District. We appreciate this opportunity to present the Committee with information regarding impacts of the Endangered Species Act on the District's operations.

Over the past fifty years, the District has developed an extensive system of flood control facilities including 35 dams and detention basins, 48 miles of levees, 188 miles of open channel and 182 miles of underground storm drains. Timely maintenance of the District's system is critical to ensure protection of the lives and property of our residents. The District is mandated to maintain projects constructed with Federal partners to standards dictated by the Federal agency; and the Federal Emergency Management Agency, or FEMA, mandates local government to maintain its flood control facilities as a condition of participation in the National Flood Insurance Program. Failure to do so can result in expulsion from the Program and other sanctions.

For decades, the District routinely maintained its system without outside interference. But over the past several years we have been hamstrung in this effort through the regulatory activities of several Federal agencies including the Corps of Engineers, the Environmental Protection Agency and the U.S. Fish and Wildlife Service. These agencies have veto power over local flood control maintenance activities by virtue of regulations promulgated under authority of the Clean Water and the Endangered Species Acts. Although these laws have been on the books for many years, their impacts have become more burdensome as Federal agencies have issued new and more stringent regulations, often without the authority of new law, and sometimes as a means to negotiate settlement of environmental lawsuits of questionable merit. An example is the lawsuit and negotiation which resulted in the Corps adopting the so called Tulloch Rule which was recently overturned by the courts.

Today, three separate Federal permits are required under the Clean Water Act to operate and maintain the District's flood control systems, including a Section 404 Dredge and Fill Permit from the Corps of Engineers. In addition, under Section 7 of the ESA, the Corps is required to "consult" with the Fish and Wildlife Service where a permitted activity may jeopardize an endangered or threatened species, and EPA retains veto power over any permit issued by the Corps. This web of multiple permit requirements prevents timely maintenance of critical flood control facilities, and poses an ongoing threat to the public health and safety. Many examples can be cited:

- In one case, the District was prevented from making critical repairs to the Santa Ana River levees because two endangered woolly-star plants were discovered in the general area of the remedial work. The District is mandated to maintain these levees by the Corps of Engineers, which constructed them, but could not do so for more than two years even though a failure would have been catastrophic.

- In another case, in January of 1993, overflow from Murrieta Creek caused serious flooding in the Old Town area of the city of Temecula. Flows raged through businesses, restaurants and residences, causing over ten million dollars in property damage. I was there that night. The power was out, and as I looked into the darkness of Old Town I was certain that many lives had been lost. Miraculously none were, but there were many close calls. The real tragedy is that the flood was absolutely preventable. Prior to the flood, Federal officials had refused to allow mechanical clearing of vegetation and removal of accumulated sediment on the creek, partially due to alleged concerns about the endangered least Bell's vireo, and only after the damage occurred did they allow the critically needed maintenance to take place. Ironically, FEMA later reimbursed the District and the City of Temecula for much of the cost of the post flood maintenance.

Survival of an endangered or threatened species was not at stake in either of the cited cases, but inflexibility built into the ESA, coupled with indifference to public health and safety issues on the part of resource agency and regulatory staffs, prevented the District from taking appropriate corrective measures in a timely manner, unnecessarily jeopardizing lives and property.

I have focused on maintenance issues today, but the District has also experienced major difficulties with the ESA in permitting new flood control projects. Additional information on these problems has been provided in the District's written testimony, along with a specific list of reforms to the Endangered Species Act recommended by the District.

Time prevents covering the entire list, but most critical of the proposed reforms is a categorical exemption from provisions of the ESA for routine maintenance and emergency repair of all existing flood control facilities. Accordingly, on April 8, 1997, the District's governing Board approved Resolution No. F97-5, supporting H.R. 478, the Flood Prevention and Family Protection Act of 1997. A copy will be provided to the Committee upon certification by the Clerk of the Board.

The District fully understands that flood control programs and projects are currently undergoing dramatic change. But numerous citizens still rely on existing flood control systems to protect their lives and property, and reform is necessary to ease the regulatory burden on local government, and to allow critically needed maintenance to take place. Thank you for consideration of these remarks, and the additional information and recommendations contained in our written testimony.

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